

DEVELOPMENT OF A SALARY SCALE FOR SALARIED AND SUPERVISORY
POSITIONS THROUGH JOB EVALUATION METHODS

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POSITIONS THROUGH JOB EVALUATION METHODS

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TABLE OF CONTENTS

	PAGE
ACKNOWLEDGMENTS.....	iii
EXPLANATION OF TERMS USED.....	vi
INTRODUCTION:	
Definition of Job Evaluation.....	1
General Objectives.....	3
Need for Job Evaluation.....	4
General Procedure.....	6
DISCUSSION:	
Selection of Typical Company for Actual Case Study	12
Comparison of Point System and Factor Comparison System.....	12
Defining the Factors and Developing Forms.....	16
Job Analysis Survey.....	18
Selection of Key Jobs.....	20
Factor Ranking of Tentative Key Jobs.....	21
Salary Allocation to Tentative Key Jobs.....	22
Elimination of Non-Conforming Jobs.....	24
Formulation of Job Comparison Scale.....	24
Ranking of Remaining Jobs.....	25
Completion of Job Comparison Scale.....	26
Checking Results.....	27
CONCLUSIONS.....	30
BIBLIOGRAPHY.....	36

TABLE OF CONTENTS (CONT'D)

	PAGE
APPENDIX A:	
Figure 1. Organization Chart of Auto-Soler Co....	37
Figure 2. Definition of Factors.....	38
Figure 3. Factor Ranks Assigned to Tentative Key Jobs.....	39
Figure 4. Monetary Allocation to Tentative Key Jobs.....	40
Figure 5. Monetary Allocation and Corresponding Rank per Factor.....	41
Figure 6. Comparison of Factor Ranking and Monetary Ranking.....	42
Figure 7. Comparison of Factor Ranking and Mone- tary Ranking After Three Tentative Key Jobs Are Eliminated.....	43
Figure 8. Comparison of Factor Ranking and Mone- tary Allocation After Three Tentative Key Jobs Are Eliminated.....	44
Figure 9. Factor Ranks Assigned to Non-Key Jobs..	45
Figure 10. Job Comparison Scale for Mental Requirements.....	46
Figure 11. Comparison Scale for Skill Requirements	47
Figure 12. Comparison Scale for Physical Requirements.....	48
Figure 13. Comparison Scale for Responsibility....	49
Figure 14. Comparison Scale for Working Conditions	50
Figure 15. Comparison of Evaluated & Present Salary	51
Figure 16. Scatter-Diagram with Trend Line.....	52
APPENDIX B.....	53
APPENDIX C.....	87

EXPLANATION OF TERMS USED

Factor---In the factor comparison method, factor refers to a combination of broad characteristics that are descriptive of a job.

Factor Comparison Method---Refers to that particular type of job evaluation where jobs are compared to each other on a factor basis in order to determine the relative position of each job in a given organization.

Factor Ranking---Refers to the procedure to comparing jobs with one another on a factor basis.

Job Analysis Questionnaire---Refers to the questionnaire filled out by employees in order to obtain specific information about a job, prior to the development of a job evaluation program.

Job Comparison Scale---Refers to the salary scale obtained by the factor comparison method of job evaluation.

Job Descriptions---Refer to the descriptions of each job compiled by the job analyst and the immediate supervisor from information obtained in the job analysis questionnaire.

Job Evaluation---Refers to a systematic and impartial method of pricing jobs, accomplished by thorough and comprehensive job analysis.

Job Specifications---Refer to the concise and tabulated information of the requirements of each job. It is compiled by the job analyst from the job analysis questionnaire.

Key Jobs---Refer to the standard of bench-mark jobs that are selected on the assumption that they are being paid an equitable and fair wage. These jobs should sample all levels of jobs from high to low and all the major functions of the organization.

Point System---Refers to that particular type of job evaluation where a definite number of points are assigned to a job according to the degree of a specific factor required by the job.

Salary or Monetary Allocation---Refers to the distribution of a job's salary among the five factors in the factor comparison method.

Trend Line---Refers to the line of best fit on the scatter-diagram of evaluated rates versus present actual rates.

DEVELOPMENT OF A SALARY SCALE FOR SALARIED AND SUPERVISORY POSITIONS THROUGH JOB EVALUATION METHODS

INTRODUCTION

Job evaluation is a convenient name for a systematic and impartial pricing of jobs, accomplished by thorough and comprehensive job analysis. Essentially, it is a study of the relative worth of descriptive job characteristics, culminating in a standardization of base rates and the establishment of a rate structure.

Few managements that do not have a sound job evaluation program installed feel satisfied or certain about their present wage scales. Employee discontent as to wages can be traced to its two major sources:

1. Dissatisfaction with inequalities in the present rate structure, or with supposed inequalities.
2. Individual or group pressure for higher earning power.

The latter arises primarily from salesmanship on the part of individuals or from group pressure by unions. Job evaluation is primarily concerned with the former source of discontent. However, it becomes the solid foundation of a wage administration plan, which, in turn, will also elimin-

ate inequalities resulting from self-salesmanship by specifying a definite **rate for** a given job. It further points out to individuals and groups how they can attain larger incomes.

This distinction must be made clear. Job evaluation is not designed to stop the pressure of employees for higher earning power, for this would be disastrous because it would curtail ambition. On the contrary, job evaluation is designed to point out to employees what they must do to gain higher earning power, thereby promoting ambition.

Job evaluation is relative. That is, a job of high difficulty, skill and responsibility will be paid more than a job of low difficulty, skill and responsibility. No one can justly question the fairness of such a procedure. A company in a certain industry may have a relatively high wage scale and another one a low wage scale. If the relative relationship of job rates in the low wage scale company is correct, there is good probability that there will be employee contentment. On the other hand, if in the high wage scale company there are many wage rates out of line, discontent will result despite the fact that the wage scale as a whole is high. Workers are as keenly interested in their relative rates of compensation as in the absolute amounts of those rates. There is considerable evidence that one of the fundamental values of wage differentials is the differential of prestige it creates among workers,

quite as much as the differential of the absolute earnings themselves. Accordingly, the primary duty of a management which is attempting to set up a fair and defensible schedule of rates is to ascertain that the relative standings of all jobs are correctly determined; the secondary duty is to price each job, using a method which will be simple, objective, equitable, easily understood and stable in the results secured.

The general purpose of job evaluation is to determine the monetary value of each job in an organization. However, the primary purpose is to indicate only the relative importance of the job within the organization, unassociated to a monetary basis. The money values attached to individual jobs must of necessity vary with prosperity or depression periods, shortage or surplus of labor, and various other factors; but the relative positions of all jobs within a given organization will not change.

While job evaluation is usually thought of in connection with industrial organizations, it is certainly not limited to application in this field. The need for such a plan is just as great in other organizations such as banks, stores, utility companies, etc., as it is in the industrial field. As early as the 1920's a few progressive companies were experimenting with such plans, but the depression really accelerated these efforts (largely through the need for reduced costs) and established the job evaluation pro-

cedure as an essential tool of scientific management. The majority of industries found when they began analyzing their labor costs, that they were paying a variety of wage rates for the same kind of work. They thereby found the source of much employee discontent and resentment. Basically, the cause of such conditions was in the evolution of small companies becoming large companies. In a large organization, responsibility must be delegated to subordinates. When responsibility for wage rates is delegated to various foremen or supervisory personnel, inconsistent pay practices are the natural aftermath. Inequalities resulted from the following practices, which were indeed not unusual:

1. The man who was the smoothest talker, the best self-salesman, or who squawked the loudest, got the most money.
2. The foreman was a good pal to his friends and relatives.
3. The employee "got something on his foreman" and then blackmailed him for a raise.
4. An individual's personality or some solitary super-performance record obtained continued recognition via the pay check.
5. Certain jobs carried prestige from past practices which no longer existed due to changed or improved methods.

Such practices resulted in inconsistent wage rates between employees, departments, plants and companies. No consistent cost standards could be established on such a basis. It was evident that corrective measures were needed. As previously mentioned, this was a condition found in the larger industries where responsibility had been delegated to subordinates. Therefore, the smaller the company the less probability existed for inconsistent wage rates. For as long as the rates were determined by one man, as in a "one man" company, the rates would tend to be consistent.

Consequently, the job evaluation plans were developed and the responsibility for administering them was centralized in one individual or a small group. In this respect, companies have placed their job evaluation responsibility in Industrial Engineering Departments, Personnel Departments, or special job evaluation committees. Wherever the responsibility is delegated, it is desirable and essential for an efficient evaluation committee to consist of personnel who are familiar with the duties and responsibilities of the jobs to be evaluated. They should be respected by all personnel for their honesty and sincerity of purpose. They must be able to:

1. Write comprehensive job descriptions.
2. Sift out irrelevant matter in the descriptions.
3. Write accurate job specifications.
4. Use good judgment in evaluating jobs.

5. Substantiate the results to the personnel affected.

It is a comparatively easy task to determine whether a carpenter or a janitor should be paid the more money. No one doubts that the carpenter should receive more compensation. It is also a simple task to reason why a carpenter should be paid more money than a janitor. The probable reasons are that he has more skill, he must have more education, his training for the job is longer, etc. This, in a simplified sense, is job evaluation. But, when it comes to determining whether a carpenter or a machinist should be paid more, the task becomes more complex. To adequately and justly determine which job is entitled to the more money, the job must be analyzed by its component parts. Various jobs are broken down into various parts in the many job evaluation plans now in use. These parts are labeled as attributes, characteristics, items, etc., but in most plans they are called factors. In other words, the factors of a job should be considered when trying to determine why a particular job should be paid more or less money than another. If an individual who is not familiar with job evaluation were asked to list the factors he believes should be considered in evaluating a job, he would invariably list fifteen to thirty factors.¹ In analyzing such a list, it would

¹Mayhew, Rodney H., Outline for Round Table Discussion on Job Evaluation, New York: Society for the Advancement of Management, 1946, p.4.

be apparent that some of the factors mentioned would be descriptive of the personnel working on the job and others would be functions of the job itself. The average individual apparently thinks of the combination of job factors and man-factors. In evaluating any job it should be stressed that the job is being evaluated, not the personnel on the job. Since personnel may change and the job may not change, it is obvious that personnel items and job items must be separated. When this separation is made, there would be items or factors to use in evaluating jobs, and personal items to use in rewarding individuals by a merit rating system.

The number of factors in use in the various plans in existence vary anywhere from two to thirty. Most point systems employ between ten to fifteen factors whereas the factor comparison method, as used herein, is based on a standard of five factors. The number of factors, within limits, is immaterial; the important matter is that everyone on the evaluating committee thoroughly understand the definition of each factor and what it represents.

Once the factors to be used have been determined, the next step is to devise a method of measuring the amount of each factor required for a given job. There are two chief means of making this measurement, namely, the factor comparison system, and the point system. These two systems, although different in their approach, do have definite points in common. The factor comparison method emphasizes the importance

of a job in relation to other jobs in the same organization. It is relatively easy to compare a job with others in a given factor. The total importance or value of a job is the sum of the individual job factor values. The point system credits a definite number of points for a specific job factor. The point summation for all the recognized job factors gives the total point credit for the job.

If a person were asked how much skill is required on a given job, he could not answer in terms of a mathematical figure. The determination of the amount of skill, or any other factor, required on a specific job is not a factual proposition as exists in time study work where a watch can be read and a very definite time established. However, the amount of skill can be indicated in degrees such as little, average, or considerable. It is then, undeniably, a matter of opinion as to the amount of skill actually required for a specific job. Therefore, the evaluation procedure is as accurate and consistent as the opinions of those persons making the rating. Nevertheless, experience has proven that when men are familiar with the jobs being evaluated, have a thorough understanding of the definition of each factor, know what characteristics each factor includes, and are sincere in developing a sound job evaluation program, the process of analysis and comparison is so refined that the possible error in human judgment is reduced to the point of insignificance. One industrial concern tested a "block rank-

ing system"on two-hundred persons with experience ranging from experienced industrial engineers to employees not familiar with job evaluation. It was most gratifying to find that, after a preliminary explanation of the definitions regarding the measurement of the factor and by following the "key jobs" already spotted on the block ranking form, the persons invariably came to the same conclusions.²

Once the system of measurement of the factors is selected, tentative key jobs are then determined. Key jobs are absolutely essential in developing a sound plan. Key jobs or bench-mark jobs are chosen, which, in the opinion of all men on the evaluating committee, have been and are currently paid in proper relationship to each other. Of course, jobs that have grievances regarding the rates of pay, or high turnover should not be selected as key jobs. The tentative selections should sample all levels from high to low and should at the same time sample the major departments or functions of the organization. Dependent upon the number of jobs to be evaluated, it is generally best to select between twelve and twenty-five tentative key jobs, because the tests to which they are subjected will reduce this number appreciably.³ With a thorough knowledge of the

²Ibid., p.5.

³Benge, Eugene J., Job Evaluation and Merit Rating, New York: National Foremen's Institute, 1946, p.26

selected key jobs and a consistent interpretation of the definitions of the job factors, the key jobs are ranked in relation to one another from high to low. In the factor comparison method, as used herein, the tentative key jobs are factor ranked in this manner for all five factors. The next step is to allocate the salary of each tentative key job among the five factors. The theory behind this procedure is that it serves to anchor the results into the present wage scale. At this stage, the results of the factor ranking and monetary ranking should be compiled and compared. Undoubtedly, marked individual differences in rankings will occur and these should be freely discussed by the evaluating committee, not with the intent of coercing any member who is out of line to bring his vote in line, but rather with the thought of determining how wide discrepancies could arise, and of bringing out information which might cause any member to want to change his vote. The main source of wide discrepancies will be found to be differences of concepts of such terms as responsibilities, skill, etc. Invariably, many jobs will still be out of line. Where a job is grossly overpaid or underpaid, the evaluating committee will find difficulty in allocating salaries to conform to the horizontal distribution of the present salary and the vertical alignment of the previously determined factor rankings. These overpaid and underpaid jobs must be eliminated as tentative key jobs, in order to form a job comparison scale where the job that

requires the most skill, for example, will be paid the most money for the skill factor. Finally, the remaining jobs in the organization are ranked factor by factor, a dozen or so at a time, depending upon the number to be ranked. The evaluation committeemen then judge the proper relative position of the remaining jobs by comparison with each factor of the key jobs under the job comparison scale.

It is, of course, recognized that job evaluation procedures have definite limitations; they can accurately measure the amount of knowledge, the skill, the physical effort, and the responsibility required on a given job, but they cannot measure the more intangible characteristics of the individual working on the job. They cannot measure personality, character, attendance, etc. Items such as these should be graded and the employee rewarded by a sound merit rating program. Thus, a combination of job evaluation and merit rating, by providing a fair and defensible basis for the establishment of wage and salary rates, by holding out to employees stimulating hope for higher earnings, offers to management a tool of the highest utility in solving one of the most important employee-employer problems.

DISCUSSION

The objective of this thesis is the application of job evaluation principles and methods to salaried and supervisory positions.

In order to investigate the possibilities of applying job evaluation principles to the evaluation of salaried and supervisory positions, Auto-Soler Company of Atlanta was selected as a typical organization for actual case study.

The two chief means of evaluating jobs in use today are the Point System and the Factor Comparison System. Both have their advantages and disadvantages. The former method employs a block ranking procedure where the characteristics are divided into five or six degrees and points assigned to each degree of each characteristic. The total number of points used equals the total number of points assigned to the highest degree of each characteristic. This method takes a definite step toward analysis of the individual characteristics of the job, although simplicity of construction and evaluation is the foremost reason for its popularity and the outstanding advantage of this system.

Some of the more important disadvantages of this system are the following:

1. The assignment of point values for varying degrees of each factor is arbitrarily done.

In a given system, who shall say that if one point is to be allowed for a job requirement of less than six years education, then four points are correct for eight years of education and eight points correct for twelve years of education? One could with equal justification either allow one point for each year of education or apply some form of geometric progression for the number of points for additional years of education. No one knows which procedure would be correct.

2. Upper limits of the points to be assigned the several factors must be arbitrarily done. Who shall say that the highest degree of physical requirement is worth more or less than the highest degree of skill requirement and how much more or less?
3. The job analyst tends to set the value of the job rather than the job comparison. If the job analyst, for instance, decrees that the job requires a high school education, he has automatically decreed a certain number of points for the educational requirement of the job. If this analyst is consistent in his judgment, and he analyses all the jobs

to be covered in the job evaluation program, little harm will be done. But, where there is more than one analyst describing jobs, there will, invariably, be as many standards of judgment as there are individuals. Therefore, a committee assigned to evaluating jobs, performs a clerical task of translating the statements prepared by the job analyst into points on the basis of a pre-determined point scale. The committee, therefore, merely perform a clerical function and not a judgment function.⁴

The factor comparison method, or the weighted-in money method, as it is sometimes called, selects characteristics as in the fore going, but the usual procedure is to classify everything within five major factors, namely:

1. Mental Requirements
2. Skill
3. Physical Requirements
4. Responsibilities
5. Working Conditions

The weighting is accomplished by ranking a series of jobs on one factor at a time, thereby getting a relative posi-

⁴Ibid., p.19.

tion of a job's worth, and then applying a monetary scale to the various positions of each job, for each of the five factors. When the jobs have been ranked and the scale applied for all five factors, it is only necessary to add the amounts applied to each factor for a specific job and the sum is the evaluated rate for that job. The only disadvantage of this system is that, as the wage levels change in a community, the evaluated rates must be changed accordingly. This is not a serious disadvantage because the more important factor of relative importance of a job within an organization remains the same regardless of economic conditions. The rates could be readily changed by the simple application of a multiplier to the present rates. The advantages of the factor comparison method are numerous:

1. It obviates the step of translating from points to money.
2. It allows unlimited room at the top for exceptional worth, and therefore is readily adaptable to salaried and supervisory personnel.
3. A single multiplier can be used to keep the whole structure up to date, provided the relative importance of jobs does not change.
4. It insures close adherence to the all important relative worth of each job in an organization. This is its surest virtue.

Accordingly, the factor comparison method was chosen for investigating the possibilities of applying job evaluation principles to supervisory and salaried positions because it evaluates a job on a comparative basis and allows unlimited room at the top of the scale; the latter is essential in evaluating these type positions.⁵

An organization chart of the company as indicated in Figure 1, (Appendix A) clearly shows the supervisory positions to be evaluated. These positions, including salaried workers, ranged from Secretary to Vice-Presidents, inclusive. The jobs to be evaluated are listed below and will hereafter be referred to by designated letters as follows.

- A-Vice President-Sales
- B-Standards & Planning Engineer
- C-Time Study Engineer
- D-Office Manager
- E-Engineering Draftsman
- F-Receptionist & Telephone Operator
- G-Senior Clerk-Accounting Department
- H-Senior Cost Clerk-Engineering Department
- I-Bookkeeper
- J-Accounting Clerk
- K-Mail & File Clerk
- L-Transcribing Machine Operator
- M-Stenographer-Typist
- N-General Office Clerk
- O-Secretary-Engineering Department
- P-Secretary-Production Department
- Q-Receiving Clerk
- R-Vice President-Manufacturing
- S-Industrial Engineer
- T-Assistant Vice President-Sales
- U-Advertising Manager

⁵Lytte, Chas. W., Job Evaluation Methods, New York: Ronald Press Company, 1946, p.38.

V-Secretary & Treasurer
 W-Export Manager
 X-Comptroller
 Y-Purchasing Agent
 Z-General Factory Superintendent
 IA-Assistant Treasurer
 IB-Schedule & Time Clerk
 IC-Manager, Parts Department
 ID-Service Manager
 IE-Manager, Mail & File Department
 IF-Shipping Superintendent
 IG-Secretary-Sales

Before beginning the work of a job survey, the factors to be used in evaluating the jobs were clearly defined. Accordingly, Figure 2 gives the definitions of the five factors. Some of the characteristics of the factors, such as leadership, independent decisions and initiative under "Skill"; contacts with officers of the company, customers, and vendors under "Responsibilities", have been advocated by E. E. Warren⁶ and John H. Eikenberg.⁷ Definitions were worked out in conjunction with the preparation of forms to be used in the survey. It is of utmost importance that all members working on the job evaluation program clearly understand and be able to distinguish between such terms as skill, mental requirements, responsibilities, etc. Otherwise, what one person regards as skill another might regard as a mental requirement and still another might regard as a responsibility. It is not so important

⁶Warren, E. E., "Evaluation of Managerial Positions," New York: American Management Association (Personnel Series 107, 1947) pp.16-18.

⁷Eikenberg, John H., "A Practical Job Evaluation Program," American Management Association (Office Management series 106, 1944) p.29.

that certain sub-items be classified under a particular factor as it is that all members of the evaluating committee adopt the same concept for each of the factors; that is, they should have in mind the same characteristics when discussing mental requirements, skill, physical requirements, responsibility and working conditions. To cite an example of the distinction to be made between the five factors, consider the receiving clerk in the shipping department. This job has some mental requirements in that the clerk must have a high school education; he must count the various parts of incoming shipments. The work further involves certain skills such as using materials handling equipment, and storing so as to avoid congestion. Certainly, there are high physical requirements in the manual handling of freight. The job has definite responsibilities for the material handling equipment and for keeping inventory records. Finally, the working conditions under which the job is performed must be taken into account. In the winter, the shipping room is subject to extreme cold; in summer, extreme heat; it is always noisy and congested. Here are five distinct aspects of one job.

The forms to be used in the work were prepared concurrently with the setting up of exact definitions. Since there are five chief evaluating factors, the job specification form was divided into five parts, one for each factor in order to facilitate the evaluation process. The principal forms used were the following:

1. Job Analysis Questionnaire
2. Job Description
3. Job Specification⁸

The job analysis questionnaire is used to record the original data and from it the job description and job specification forms were completed. The job analysis form was made out by the employee on the job with the assistance of the job analyst who clarified any dubious statements. The questionnaires were then reviewed by the immediate supervisor. Based upon the data gathered by the questionnaire, the job description and job specification were prepared. In regard to content, the job description and job specification contain much the same information as the questionnaire, however in a different arrangement. The job description (See Appendix B) records the main function and basic duties of the job. The job specification (See Appendix C) records these duties and other requirements of the job in tabular form according to the five basic factors. The job evaluation committee consisted of: Mr. C. E. Redfern, Planning Engineer, Mr. M. H. Johnson, Standards Engineer, both of Auto-Soler Company and the author. A sufficient number of specifications were then typed, one of each job for each committee member. Messrs. Redfern and Johnson ranked each job once and the author ranked each job three

⁸Lytle, Chas. W., Job Evaluation Methods, New York: Ronald Press Company, 1946, pp.102-134.

times. The author ranked the jobs at three different intervals rather than successively in order to obviate the influence of a previous ranking. At this point the job evaluation process commences.

The key job comparison scale is the heart of the job comparison method. The primary object of any job evaluation study should be to determine the relative standing of all jobs in the organization. The factor comparison method accomplishes this by making job-to-job comparison according to each of the five major factors. The committee selected seventeen tentative key jobs, with the premonition that this number would be reduced because of the tests to which these jobs would be subjected. The selections (1) sampled all job levels from high to low, (2) sampled the major functions of the organization, (3) were made from jobs whose rates compared favorably to similar jobs in the locality. The following were selected as tentative key jobs:

- A-Vice President-Sales
- B-Standards & Planning Engineer
- C-Time Study Engineer
- D-Office Manager
- E-Engineering Draftsman
- F-Receptionist & Telephone Operator
- G-Senior Clerk-Accounting Department
- H-Senior Cost Clerk-Engineering Department
- I-Bookkeeper
- J-Accounting Clerk
- K-Mail & File Clerk
- L-Transcribing Machine Operator
- M-Stenographer-Typist
- N-General Office Clerk
- O-Secretary-Engineering Department
- P-Secretary-Production Department
- Q-Receiving Clerk

The seventeen key jobs were first ranked according to their mental requirements. This ranking was performed by a physical sorting of the specifications themselves, from lowest to highest. When a committeeman had arranged the specifications of the seventeen tentative key jobs according to his judgment of their mental requirements, he then recorded his entries on a data sheet. The procedure in the event of ties was to give both jobs the same ranking number. This same procedure was followed for all five factors. For example, on the first ranking, the author was unable to decide whether Job D-Secretary, Engineering Department, entailed more or less mental requirements than Job P-Secretary, Production Department, for tenth and eleventh places. They were subsequently tied by allotting each place 10.5 and, therefore, the next place utilized was twelve, (See Figure 3). This practice was followed wherever ties occurred in order that the last number used would be seventeen. If the tie occurred between the first two places, each would be accorded the number 1.5; if the tie occurred between the last two, each would be accorded the number 16.5. There were five rankings made in all; one by the Planning Engineer, one by the Standards Engineer and three by the author. The five different rankings were totaled and averaged to yield the resultant illustrated in Figure 3.

The salaries of each of the tentative key jobs were then distributed among the five factors, independent of the previous factor ranking. Some authorities advocate the use

of percentages rather than absolute money values in making the monetary distribution to tentative key jobs. However, the author found it much more satisfactory to use absolute money values since it is difficult to keep in one's mind the amount of money a percentage figure actually represents. As per example, results of the factor ranking (Figure 1) indicate Job G-Receiving Clerk required more physical exertion than Job A-Vice President-Sales. It is desirable to **show this** same relation-ship in the monetary allocation of salaries. However, if a percentage basis is used, 5% of Job A might be set aside for physical requirements and 20% of Job G for physical requirements. This is misleading because it gives the impression that more money is being set aside for Job G than Job A. Computation of the absolute money allotted in each case reveals:

Job A as receiving $(.05)(\$750)$ or \$37.50

Job G as receiving $(.20)(\$175)$ or \$35.00,

which disrupts the relative position of each job as agreed upon in the foregoing factor ranking. Hence an absolute monetary allocation creates a clearer and truer picture of the actual distribution of money. The author made the monetary allocation to each of the five factors of each job at three spaced intervals, also, in order to avoid being influenced by the money distribution of a previous ranking. The results at each interval were then compared with the results of the factor ranking. There were many changes

and compromises at this stage since it was not only necessary to satisfy the horizontal distribution of salary so that the total money distributed among the five factors equalled the present actual salary, but it was also necessary to satisfy the vertical alignment of jobs so as to conform, as much as possible, to the previously agreed upon factor rankings.

That is, since it was previously agreed upon that Job G Was the highest in physical requirements, followed by K, N, and P, then in the allocation of rates it is important that the amount of money allowed for the physical requirements of Job G be greater than that allowed for the physical requirements of Job K, and the amount for K in turn be larger than that for N and so on. The final results of this allocation were compiled in Figure 4. Where a job is at present grossly underpaid or overpaid, it was found extremely difficult to allocate the salary within the limits of the horizontal distribution and the vertical alignment. Where a job was overpaid, for example, Job E-Engineering Draftsman, it was necessary to place in the columns more money than seemed reasonable when considering the vertical alignment of that job with others in any given column. Similarly, where a job was underpaid, as Job K-Mail & File Clerk, it was found impossible to allocate enough money to the various columns of the five factors to support its corresponding vertical alignment in the factor ranking. Figure 5 is a compilation of the monetary allocation and the corresponding rank of each job under each

factor. Figure 6 is a comparison of the numerical factor rankings and monetary rankings. It is obvious that the factor rankings and monetary rankings do not agree. This is positive indication that some job or jobs are overpaid or underpaid. However, upon investigation, the problem solves itself; for, when three of the tentative key jobs are eliminated, the salary distribution compares favorably with the factor ranking. The jobs eliminated were

1. Job G-Engineering Draftsman, which was overpaid,
2. Job K-Mail & File Clerk, which was underpaid,
3. Job P-Secretary, Production Department, which compared almost identically to Job O-Secretary, Engineering Department.

The only discrepancy still remaining was between Job H-Senior Cost Clerk and Job I-Bookkeeper, in the "Responsibility" column.(See Figures 7 and 8.) The factor ranking indicated Job I entailed more responsibility, while the monetary allocation showed Job H superior in responsibility. Upon review of this discrepancy, the committee, by majority vote, changed its attitude toward the factor ranking and felt that the allocation of money was the correct status.

The remaining fourteen jobs were used to form the backbone of the job comparison scale, as illustrated in its final form in Figures 10-14. The remaining nineteen jobs were divided into two groups, one group of ten, and

another of nine, before applying the job comparison scale. Each job in each group was factor ranked for mental requirements in the same manner as the tentative key jobs were factor ranked. This facilitated application of the job comparison scale because then nine or ten job specifications could be compared to the specifications of the key jobs at one time. The jobs were then inserted into the job comparison scale for mental requirements in their proper relative position. The jobs were then re-ranked according to skill and the comparison process carried on as before. This procedure followed for all five factors, as illustrated in Figure 9. Of course, the monetary value assigned to these jobs for each factor was obtained directly from the job comparison scale. In as much as the variation of viewpoints of the committee members at this stage was very small, if not insignificant, the application of the last nineteen jobs to the job comparison scale was performed solely by the author. The original key job comparison scale consisted of fourteen jobs, thus affording fourteen reference points. As the fifteenth job was evaluated and entered upon the job comparison scale, there were then fifteen reference points. Therefore, the job comparison scale in its final form had thirty-three jobs or reference points. This practice narrows the calibration or relative position between adjacent jobs and, therefore, makes the comparison of additional jobs that much easier. The ulti-

more objective of this thesis is the job comparison scale for each of the five factors as illustrated in its final form in Figures 10-14.

The key jobs are distinguished from the remaining jobs by the asterick following said jobs under each factor of the job comparison scale.

It is well to note that when the key jobs were originally selected for inclusion in the comparison scale, it was assumed that their present rates were correct. This assumption may or may not be true; certainly the test, to which the salaries of these jobs were subjected by comparison of the salary allocation to the factor ranking and thus eliminating those out of line, would indicate that the remaining key jobs are not too far out of line with one another, if at all. If one desires, it may be well to re-evaluate the key jobs by putting them through the same process as has been done with the remaining nineteen jobs. This procedure is arbitrary and the author, for his purposes here, takes his prerogative of simply mentioning this additional procedure.

Believing it always a good policy to check one's results, there were three major checks that were applied to the results of the job evaluation study.⁹

⁹Benge, Eugene J., Job Evaluation and Merit Rating, New York; National Foremen's Institute, 1942, pp.34-35.

1. Comparison of Present Total Payroll to Evaluated Total Payroll.---If the work has been well done and with tedious care, the proposed expenditure for jobs should approximate the present payroll, assuming that those, who are now overpaid, would be reduced to the evaluated rates and those, who are now underpaid, would be increased to the evaluated rate. This check is illustrated in Figure 15, which indicates that the present total salary for the thirty-three evaluated jobs is \$9,755 per month; the evaluated salary is \$9,530 per month. The evaluated total salary is thus \$225.00 less than the present payroll per month.
2. Comparison of the Present Individual Salaries to the Evaluated Individual Salaries.---This was a finer check than that indicated in (1) above. Figure 15 indicates the evaluated salary per factor, and compares the total evaluated individual salaries to the actual individual salaries. Of course, the key jobs will have the same rate under the evaluated column as they have under the present

salary column. Excluding key jobs, there were three jobs that were not selected as key jobs whose evaluated salary and present salary were identical; there were nine jobs whose evaluated monthly salary was within \$10.00 of the present monthly salary; there were thirteen jobs whose evaluated monthly salary was within \$25.00 of the present monthly salary, and all but three jobs were within \$50.00 of the present monthly salary. The wide discrepancy of Job V-Secretary and Treasurer's evaluated monthly salary of \$247.00 less than the present monthly salary is due to the organization's policy of paying the top officials of the company a standard salary regardless of their individual duties.

3. The third check was a scatter-diagram as illustrated in Figure 16. The horizontal scale represents evaluated monthly salaries and the vertical scale represents the present actual salaries. A trend line or line of best fit is drawn in as computed by mathematical formula as follows:

Method of Least Squares¹⁰

y equals mx plus b

x---value of the abscissa

b---intercept of ordinate

y---value of the ordinate

m---slope of the line, y
divided by x.

	y	x	x + b	xy	x ²	
Job A	14.0	14.0	14.0 + b	196.0	196.0	Total xy equals $m(x^2) + b(x)$
Job B	7.0	7.0	"	49.0	49.0	(1).1075.7 " $m1035.5 + b157.7..$
Job C	4.5	4.5	"	22.5	22.5	Total y " $m(x) + nb$
Job D	4.0	4.0	"	16.0	16.0	(2)..162.1 " $m157.7 + 33b$
Job E	5.0	4.5	"	22.5	22.1	Multiply (2) by 47.8 to solve
Job F	2.0	2.0	"	4.0	4.0	simultaneously with (1).....
Job G	2.2	2.2	"	4.8	4.8	774.84 equals $753.81m + 157.7b$
Job H	4.0	4.0	"	16.0	16.0	1075.70 " $1035.50m + 157.7b$
Job I	3.7	3.7	"	13.7	13.7	300.86 " $281.69m$
Job J	2.6	2.6	"	6.8	6.8	(3)...m " 1.07
Job K	2.0	2.2	"	4.4	4.8	Substituting (3) in (1).....
Job L	1.7	1.7	"	1.9	1.9	157.7b equals -31.74
Job M	1.8	1.8	"	3.2	3.2	the y intercept b equals -.201
Job N	2.0	2.0	"	4.0	4.0	Therefore:
Job O	2.2	2.2	"	4.8	4.8	trend line equation is
Job P	2.2	2.2	"	4.8	4.8	
Job Q	2.5	2.5	"	6.3	6.3	y equals $1.07x - 0.201$
Job R	10.0	10.1	"	101.0	102.0	
Job S	10.0	9.8	"	98.0	96.0	Scale
Job T	6.0	7.3	"	45.8	57.7	Salary Units(m)
Job U	6.0	6.4	"	38.4	41.1	\$100 1.0
Job V	14.0	9.0	"	126.0	81.0	150 2.0
Job W	7.1	6.9	"	48.3	47.6	200 3.0
Job X	5.0	4.8	"	24.0	23.0	250 4.0
Job Y	5.0	5.1	"	25.5	26.0	300 5.0
Job Z	10.0	8.9	"	89.0	79.1	350 6.0
Job 1A	5.0	4.6	"	23.0	21.2	400 7.0
Job 1B	4.2	3.3	"	13.9	10.9	450 8.0
Job 1C	4.0	5.0	"	20.0	25.0	500 9.0
Job 1D	4.0	4.0	"	16.0	16.0	550 10.0
Job 1E	3.5	3.6	"	12.6	12.9	600 11.0
Job 1F	2.8	3.3	"	9.3	10.9	650 12.0
Job 1G	2.2	2.2	"	4.8	4.8	700 13.0
Total	162.1	157.7		1075.7	1035.5	750 14.0

¹⁰Lytle, Charles W., Job Evaluation Methods, New York: Ronald Press Company, 1946, pp. 182-183.

CONCLUSIONS

It is evident that job evaluation principles and methods can be applied with equal facility to salaried and supervisory positions as to routine repetitive jobs. Certainly, the benefits of good job evaluation should be made available in the very area where jobs are of the greatest individual importance---the managerial area. With this objective in mind, the author wishes to stress the following points:

1. The only major change in evaluating supervisory jobs rather than "rank and file" jobs is in the definition of factors. Since the type of work performed by supervisory personnel is different than that performed by factory workers, it is only logical that the factors used to describe the work should be different. In this respect, referring to Figure 1, the only significant differences are:
 - (a) Under "Skill"---the degree of leadership, initiative and judgment should be expressed.
 - (b) Under "Responsibilities"---the number and type of contacts whether with the public, customers, vendors, officers of the company, or employees should be expressed.

(c) Under "Responsibilities"---there should be a finer breakdown of the degree of supervision; for example, it may be divided into the degree of supervision given and the degree of supervision received, and this division further subdivided into "much," "little" or "none". These differences in factor descriptions are also upheld by Victor V. Veysey who has compiled a comprehensive booklet on describing the supervisor's job.¹¹

The units for the salary distribution are in terms of dollars per month for supervisory positions rather than cents per hour as for factory workers.

2. The author advocates the use of absolute monetary values instead of percentage values in distributing the salary of each job over the five factors. Absolute values give a clear and definite picture of the amount allotted to a specific factor; percentage terms are too vague.
3. The author advocates the performance of the initial salary allocation independent of the factor ranking. Then, when the salary ranking is compared to the

¹¹Veysey, Victor V., Describing the Supervisor's Job Pasadena; California Institute of Technology, 1944, p.7.

factor ranking, discrepancies between the rankings will be obvious in a given job. This procedure is also advocated by L. P. Alford and J. R. Bangs.¹²

4. The author cannot advocate too strongly the necessity and importance of acquiring accurate, detailed and thorough knowledge of each job. The job specifications, upon which the jobs are finally evaluated, must be detailed and complete. Without such care in the preparation of job specifications, no true relationship between jobs can be established and therefore no sound job evaluation program can be developed.
5. The author advocates grouping similar jobs under a single title or class and using the evaluated salary for the class to apply to all jobs within the class rather than singularly and needlessly evaluating many similar jobs to get the same results. Pertinent examples are Job O-Secretary, Engineering Department, Job P-Secretary, Production Department, and Job IG-Secretary, Sales Department. These jobs could readily have been grouped into one class at the outset since their work is almost identical in their respective

¹²Alford, L. P. and Bangs, J. R., Production Handbook, New York: Ronald Press Company, 1946, p.1125.

departments. Then one of the jobs could have been used as the standard for the class; this job would then be evaluated and its evaluated salary applied to the other two. This procedure increases in adaptability in direct proportion to the number of jobs being evaluated.¹³

6. The author believes it essential that job evaluation, once installed, be kept alive. This can be accomplished by constant committee action, control and re-rating as job duties, or methods may change.
7. The advantages of a good job evaluation program are very definite:
 - (a) Discussion of wages with employees can be based on facts, thus obviating suspicion of personal bias.
 - (b) "Out of line" jobs become readily apparent.
 - (c) The trained employment manager or supervisor is enabled to recognize misfits and incompetents.
 - (d) The best possible return from the dollar of payroll disbursement is secured.
 - (e) The reservoir of energy in the supervisory staff will be utilized to the fullest---men will be compensated for their precise service

¹³Also advocated by D. M. Nager, author of an efficient job evaluation program for supervisory personnel of the York Corporation, York, Pennsylvania.

to the organization.

(f) The possibilities for transferring skilled employees from one job to another become apparent.

(g) Merited promotions may be made in accordance with ability.

(h) The employment department, using the detailed write-ups, has an efficient tool to facilitate hiring and placement of new workers.

Finally, one cannot overlook the importance of psychology in job evaluation, particularly, in reference to the development and the application of a job evaluation system. An industrial engineer or analyst may have a complete and thorough knowledge of the mechanics of a job evaluation system, yet fail miserably in making that system work. Why? Because job evaluation demands more of the engineer than the mere knowledge of a grading plan. Good judgment, common sense and plain logic must be applied in its use. There are many factors in a job which are intangible and incapable of precise measurement; for example, the type of analysis and decisions involved in a job, the mental demand required, and the responsibility for material and equipment losses are just a few of the more important ones.

These factors are intangible because they are difficult to evaluate or measure. They cannot be observed; they must be determined by analysis of the conditions and circumstances

surrounding a job. Therefore, the application of psychology, of good judgment, and sound reasoning in evaluating these intangible factors will result in logical and reasonable conclusions.

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APPENDIX A

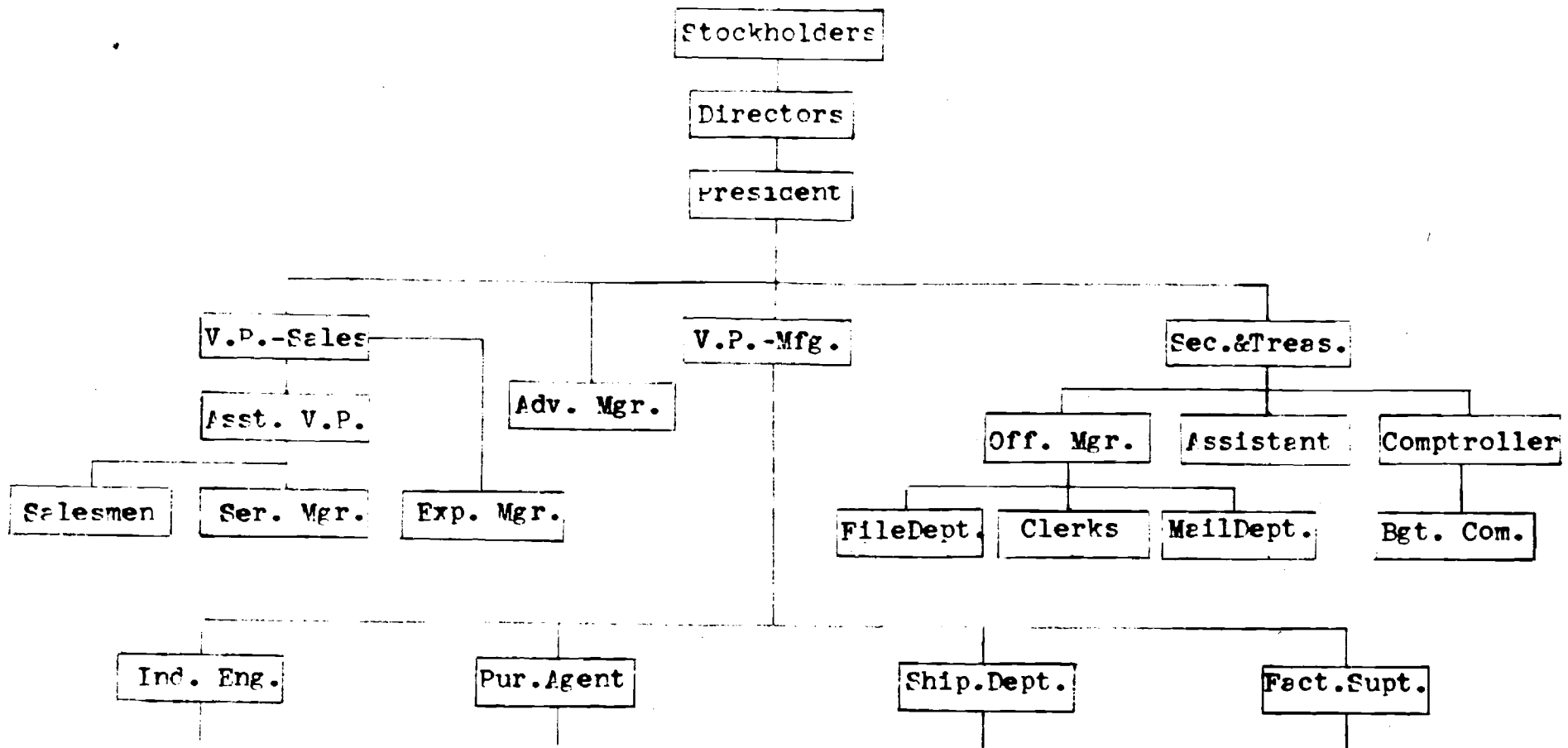


FIG. 1. ORGANIZATION CHART OF AUTO-SOLER COMPANY

1. MENTAL REQUIREMENTS:

- A. (inherent).--The possession of or application of mental traits, such as intelligence, logical reasoning, memory, 38 imagination, emotional stability, ability to get along and cooperate with others, facility in verbal expression.
- B. (acquired).--Formal education, such as grammar school, high school, trade or business school, college, graduate work or equivalents of each in experience.
- C. (acquired).--Specialized job knowledge such as engineering, accounting, advertising, secretarial.

2. SKILL

- A. Facility in muscular coordination, as in operating machines, repetitive movements, dexterity, assembling, disassembling.
B. Specific job knowledge necessary to the muscular or mental coordination of the work acquired through performance of the job.

Example :

- (1) In operating an adding machine, the knowledge of which
key to depress for a sub-total would be skill.
- C. Appraises the degree of initiative, creative effort, in-
genuity, independent decisions, leadership, judgment.

3. PHYSICAL REQUIREMENTS:

- A. Physical effort, such as walking, lifting, standing, sitting. Consider both the amount exercised and the continuity.
- B. Type of operation performed, as repetitive, varied, intermittent, semi-automatic, etc.
- C. Physical status, as to age, height, weight, sex and strength.

4. RESPONSIBILITIES:

- A. For raw, processed, and finished materials, tools & equipment.
B. For money, negotiable securities, making decisions that affect cost, probability of and cost of errors.
C. For contacts with the public, customers, vendors, officers of the company and employees. Appraises the ability to deal tactfully with and influence others.

- D. For records.

- E. For supervision.

- (1) Primarily, the type and grade of supervision given to subordinates; the number of subordinates is secondary. Responsibility for work and safety of others, for organizing, planning, directing, instructing and controlling others.

- (2) Degree of supervision received. For example, if jobs A & B gave no supervision to subordinates but A received much closer immediate supervision than B, then B would be entitled to a higher rating than A.

To illustrate the four degrees of supervision:

Highest degree---gives much---gets little

High " --- " " --- " much

Low " --- " none--- " little

Lowest " --- " " --- " much

5. WORKING CONDITIONS

- A. Type and continuity of hazardous and/or disagreeable features of the job and its surroundings. Consider the accident and health hazards.
- B. Environmental influences, such as atmospheres, ventilation, illumination, noise, congestion, inside or outside work.
- C. Extent and continuity of travel essential to fulfillment of job.

FIG. 2. DEFINITION OF FACTORS

	Mental Requirements							Skill Requirements							Physical Requirements							Responsibility							Working Conditions						
	McLaughlin	McLaughlin	Redfern	McLaughlin	Johnson	Total	Average	McLaughlin	McLaughlin	Redfern	McLaughlin	Johnson	Total	Average	McLaughlin	McLaughlin	Redfern	McLaughlin	Johnson	Total	Average	McLaughlin	McLaughlin	Redfern	McLaughlin	Johnson	Total	Average	McLaughlin	McLaughlin	Redfern	McLaughlin	Johnson	Total	Average
Job-A	1	1	1	1	1	5.0	1.0	1	1	1	1	1	5.0	1.0	7	3	5	7	7	30.0	6.0	2	1	1	2	1	7.0	1.4	1	1	1	1	1	5.0	1.0
Job-B	2	2	2	2	2	10.0	2.0	2	2	2	2	2	10.0	2.0	11	10	10	10	10	51.0	10.2	1	2	2	1	2	8.0	1.6	15	12	13	12	15	67.0	13.4
Job-C	3	4	4	3	3	17.0	3.4	5	3	4	4	3	19.0	3.8	6	7	4	6	6	29.0	5.9	4	4	3	3	4	18.0	3.6	3	3	3	3	3	15.0	3.0
Job-D	4	3	5	4	5	21.0	4.2	3	4	5	3	5	20.0	4.0	9	8	9	9	8	43.0	8.1	3	3	5	4	5	20.0	4.0	17	17	17	17	17	85.0	17.0
Job-E	5	5	3	5	4	22.0	4.4	7	5	3	5	4	20.0	4.8	13	12	12	12	13	62.0	12.4	7	6	4	5	3	25.0	5.0	14	12	12	12	14	64.0	12.8
Job-F	12	12	13	10	13	60.0	12.0	12	9	11	8	13	53.0	10.6	10	11	11	11	11	54.0	10.8	12	9	10	9	12	52.0	10.4	11	12	11	12	11	57.0	11.4
Job-G	8	8	11	8	9	44.0	8.8	9	8	9	6	7	38.0	7.8	8	9	8	8	9	42.0	8.4	15	11	13	14	15	68.0	13.6	125	15	15	15	12	69.5	13.9
Job-H	6	7	6	7	6	32.0	6.4	6	6	6	7	6	31.0	6.2	16	16	16	165	16	80.5	16.1	5	8	7	7	7	34.0	5.9	65	7	4	7	5	29.5	5.9
Job-I	7	6	7	6	7	33.0	6.7	4	7	7	9	8	35.0	7.0	14	15	15	135	15	73.5	14.7	8	7	6	6	6	33.0	5.7	16	16	15	15	13	75.0	15.0
Job-J	9	9	8	9	8	43.0	8.6	10	11	8	11	11	51.0	10.2	17	17	17	165	17	84.5	16.9	9	10	8	10	8	45.0	9.0	125	15	14	15	16	72.5	14.5
Job-K	13	13	15	10	15	67.0	13.4	11	12	115	12	16	63.5	12.7	2	2	2	2	2	10.0	2.0	135	14	17	13	17	74.4	14.9	65	5	8	5	8	32.5	6.5
Job-L	15	15	16	16	16	78.0	15.6	17	17	17	165	17	84.5	16.9	15	14	14	145	14	71.5	14.3	17	17	16	17	16	83.0	16.6	4	4	6	4	4	26.0	5.2
Job-M	15	15	14	15	12	71.0	14.2	16	16	15	165	15	78.5	15.7	12	13	13	13	12	63.0	12.5	135	15	15	15	13	71.5	14.3	65	7	6	7	6	32.5	6.5
Job-N	15	15	12	13	14	69.0	13.8	14	14	16	13	14	71.0	14.2	3	4	3	3	3	16.0	3.2	16	16	14	16	14	76.0	15.2	65	7	6	7	7	33.5	6.6
Job-O	105	105	10	13	105	54.5	10.9	15	14	14	145	95	67.0	13.4	45	55	65	45	45	25.5	5.1	105	125	115	115	105	56.5	11.3	95	95	95	95	95	47.5	9.5
Job-P	105	105	9	13	105	53.5	10.7	13	14	125	145	95	63.5	12.7	45	55	65	45	45	25.5	5.1	105	125	115	115	105	56.5	11.3	95	95	95	95	95	47.5	9.5
Job-Q	17	17	17	17	17	85.0	17.0	8	10	10	10	12	50.0	10.0	1	1	1	1	1	5.0	1.0	6	5	9	8	9	37.0	7.4	2	2	2	2	2	10.0	2.0

FIG. 3. FACTOR RANKS ASSIGNED TO TENTATIVE KEY JOBS

	Pres. Sal.	Mental Requirements					Skill Requirements					Physical Requirements					Responsibility					Working Conditions				
		Rankings	Tot.	Avg.	Rankings	Tot.	Avg.	Rankings	Tot.	Avg.	Rankings	Tot.	Avg.	Rankings	Tot.	Avg.	Rankings	Tot.	Avg.	Rankings	Tot.	Avg.				
Job-A	750	170	165	160	495	165	245	255	250	750	250	35	30	40	105	35	215	220	210	645	215	85	80	90	255	85
Job-B	400	100	105	95	300	100	125	120	130	375	125	45	50	50	50	50	110	110	100	350	110	30	27	22	81	27
Job-C	275	70	80	75	225	75	68	63	73	204	68	36	41	31	108	36	66	61	56	183	61	35	30	40	105	35
Job-D	250	74	69	79	222	74	71	66	61	198	66	96	91	101	96	32	51	61	56	168	56	22	27	17	66	22
Job-E	300	90	85	80	255	85	106	116	111	333	111	22	17	27	66	22	59	64	54	177	59	23	18	28	69	23
Job-F	150	20	24	21	87	29	38	33	43	114	38	23	32	28	84	28	27	22	32	81	27	33	28	23	84	28
Job-G	160	27	27	32	96	32	45	40	50	135	45	33	38	28	99	33	29	24	19	72	24	26	21	31	78	26
Job-H	250	73	68	78	219	73	70	65	60	195	65	72	67	77	72	24	50	60	55	165	55	33	38	28	99	33
Job-I	225	77	72	67	216	72	56	66	61	183	61	25	20	30	75	25	53	58	48	159	53	24	19	29	72	24
Job-J	180	61	66	56	183	61	42	37	47	126	42	18	28	23	69	23	29	24	34	87	29	30	25	20	75	25
Job-K	140	20	30	25	75	25	40	35	45	120	40	29	34	24	87	29	30	25	20	75	25	21	16	26	63	21
Job-L	140	26	21	31	78	26	37	32	27	96	32	26	21	31	78	26	12	22	17	51	17	34	29	29	102	34
Job-M	140	22	27	22	81	27	28	38	33	99	33	27	22	32	81	27	22	27	17	66	22	31	26	36	93	31
Job-N	150	28	23	23	84	28	34	29	39	102	34	33	43	38	114	38	20	15	25	60	20	35	30	25	90	30
Job-O	160	26	36	31	93	31	37	32	42	111	37	37	42	32	111	37	31	26	21	78	26	29	24	34	87	29
Job-P	160	31	26	36	93	31	42	37	32	111	37	37	32	42	111	37	21	31	26	78	26	29	24	24	87	29
Job-Q	175	25	20	15	60	20	39	49	44	132	44	45	40	50	135	45	30	35	25	90	30	36	31	41	108	36

FIG. 1. MONETARY ALLOCATION TO TENTATIVE KEY JOBS.

	Pres. Salary	Mental Requirements		Skill Requirements		Physical Requirements		Responsibility		Working Conditions	
		Monetary		Monetary		Monetary		Monetary		Monetary	
		Allocation	Rank	Allocation	Rank	Allocation	Rank	Allocation	Rank	Allocation	Rank
Job-A	\$750	165	1	250	1	35	6	215	1	85	1
Job-B	400	100	2	125	2	30	9	118	2	27	11
Job-C	275	75	4	68	4	36	5	61	3	35	3
Job-D	250	74	5	66	5	32	8	56	5	22	16
Job-E	300	85	3	111	3	22	17	59	4	23	15
Job-F	150	29	12	38	12	28	11	27	10	28	10
Job-G	160	32	9	45	8	33	7	24	14	26	12
Job-H	250	73	6	65	6	24	15	55	6	33	5
Job-I	235	72	7	61	7	25	14	53	7	24	14
Job-J	180	61	8	42	10	23	16	29	9	25	13
Job-K	140	25	16	40	11	29	10	25	13	21	17
Job-L	140	26	15	32	17	26	13	17	17	34	4
Job-M	140	27	14	33	16	27	12	22	15	31	6
Job-N	150	28	13	34	15	38	2	20	16	30	7
Job-O	160	31	10.5	37	13.5	37	3.5	26	11.5	29	8.5
Job-P	160	31	10.5	37	13.5	37	3.5	26	11.5	29	8.5
Job-Q	175	20	17	44	9	45	1	30	8	36	2

FIG. 5. MONETARY ALLOCATION AND CORRESPONDING RANK PER FACTOR

	Mental Requirements		Skill Requirements		Physical Requirements		Responsibility		Working Conditions	
	Ranking		Ranking		Ranking		Ranking		Ranking	
	Factor	Money	Factor	Money	Factor	Money	Factor	Money	Factor	Money
Job-A	1	1	1	1	7	6	1	1	1	1
Job-B	2	2	2	2	10	9	2	2	13	11
Job-C	3	4	3	4	6	5	3	3	3	3
Job-D	4	5	4	5	9	8	4	5	17	16
Job-F	5	3	5	3	12	17	5	4	12	15
Job-F	12	12	11	12	11	11	10	10	11	10
Job-G	9	9	8	8	8	7	13	14	14	12
Job-H	6	6	6	6	16	15	7	6	5	5
Job-I	7	7	7	7	15	14	6	7	16	14
Job-J	8	8	10	10	17	16	9	9	15	13
Job-K	13	16	12.5	11	2	10	15	13	6.5	17
Job-L	16	15	17	17	14	13	17	17	4	4
Job-M	15	14	16	16	13	12	14	15	6.5	6
Job-N	14	13	15	15	3	2	16	16	8	7
Job-O	11	10.5	14	13.5	4.5	3.5	11.5	11.5	9.5	8.5
Job-P	10	10.5	12.5	13.5	4.5	3.5	11.5	11.5	9.5	8.5
Job-Q	17	17	9	9	1	1	8	8	2	2

FIG. 6. COMPARISON OF FACTOR RANKING AND MONETARY RANKING

	Mental Requirements		Skill Requirements		Physical Requirements		Responsibility		Working Conditions	
	Ranking		Ranking		Ranking		Ranking		Ranking	
	Factor	Money	Factor	Money	Factor	Money	Factor	Money	Factor	Money
Job-A	1	1	1	1	5	5	1	1	1	1
Job-B	2	2	2	2	8	8	2	2	10	10
Job-C	3	3	3	3	4	4	3	3	3	3
Job-D	4	4	4	4	7	7	4	4	14	14
Job-F	10	10	10	10	9	9	9	9	9	9
Job-G	8	8	7	7	6	6	11	11	11	11
Job-H	5	5	5	5	13	13	6	5	5	5
Job-I	6	6	6	6	12	12	5	6	13	13
Job-J	7	7	9	9	14	14	8	8	12	12
Job-L	13	13	14	14	11	11	14	14	4	4
Job-M	12	12	13	13	10	10	12	12	6	6
Job-N	11	11	12	12	2	2	13	13	7	7
Job-O	9	9	11	11	3	3	10	10	8	8
Job-Q	14	14	8	8	1	1	7	7	2	2

FIG. 7. COMPARISON OF FACTOR RANKING AND MONETARY RANKING AFTER THREE TENTATIVE KEY JOBS ARE ELIMINATED.

	Pres. Salary	Mental Requirements		Skill Requirements		Physical Requirements		Responsibility		Working Conditions	
		Factor Rank	Monetary Allocation	Factor Rank	Monetary Allocation	Factor Rank	Monetary Allocation	Factor Rank	Monetary Allocation	Factor Rank	Monetary Allocation
Job-A	\$750	1	165	1	250	5	35	1	215	1	85
Job-B	400	2	100	2	125	8	30	2	118	10	27
Job-C	275	3	75	3	68	4	36	3	61	3	35
Job-D	250	4	74	4	66	7	32	4	56	14	22
Job-F	150	10	29	10	38	9	28	9	27	9	28
Job-G	160	8	32	7	45	6	33	11	24	11	26
Job-H	250	5	73	5	65	13	24	5	55	5	33
Job-I	235	6	72	6	61	12	25	6	53	13	24
Job-J	180	7	61	9	42	14	23	8	29	12	25
Job-L	140	13	26	14	32	11	26	14	17	4	34
Job-M	140	12	27	13	33	10	27	12	22	6	31
Job-N	150	11	28	12	34	2	38	13	20	7	30
Job-O	160	9	31	11	37	3	37	10	26	8	29
Job-Q	175	14	20	8	44	1	45	7	30	2	36

FIG. 8. COMPARISON OF FACTOR RANKING AND MONETARY ALLOCATION AFTER THREE TENTATIVE KEY JOBS ARE ELIMINATED.

Mental Requirements								Skill Requirements								Physical Requirements								Responsibility								Working Conditions							
Rankings								Tot.	Avg.	Rankings								Tot.	Avg.	Rankings								Tot.	Avg.	Rankings								Tot.	Avg.
Job-K	9.5	10	9.5	10	10	49	9.9	9	9.5	9	8	9.5	45	9	1	1	1	1	1	5	1	10	9.5	10	9.5	10	49	9.8	3	3.5	3	3.5	3	16	3.2				
Job-R	1	1	1	1	1	5	1	2	2	2	2	2	10	2	10	10	9.5	10	10	49.5	9.9	1	1	1	1	1	5	1	1	2	1	1	2	7	1.4				
Job-S	2	2	2.5	2	2.5	11	2.2	1	1	1	1	1	5	1	9	9	9.5	9	9	45.5	9.1	2	2	3	2	2	11	2.2	9.5	9.5	10	10	9.5	48.5	9.7				
Job-U	3	3	2.5	3	2.5	14	3.8	4	4	4	4	4	20	4	5	5.5	5.5	5.5	5.5	27	5.4	5	5	5	5	5	25	5	2	1	2	2	1	8	1.6				
Job-W	4	4	4	4	4	20	4	3	3	3	3	3	15	3	7	7	7.5	7.5	7	36	7.2	3.5	3	3	3.5	3	16	3.2	7	7	6	6	6.5	32.5	6.5				
Job-Y	6	5	6	5	5.5	27.5	5.5	6	5	5	5	5	26	5.2	6	5.5	5.5	5.5	5.5	28	5.6	7	7	6	6	7	33	6.6	9.5	9.5	9	9	9.5	46.5	9.3				
Job-1A	5	6	7	6	5.5	29.5	5.9	7	8	7	8	7	37	7.4	8	8	7.5	7.5	8	39	7.8	6	6	7	7	6	32	6.4	7	7	8	7.5	8	37.5	7.5				
Job-1C	7	7	5	7	7	33	6.6	5	6	6	6	6	29	4.8	3	4	3	4	3	17	3.4	3.5	4	3	3.5	4	18	3.6	5	5	5	5	5	25	5.0				
Job-1E	8	8.5	8	8.5	8	41	8.2	8	7	8	8	8	39	7.8	3	2.5	3	2.5	3	14	2.8	8	8	8.5	8	8.5	41	8.2	7	7	7	7.5	6.5	35	7.0				
Job-1G	9.5	8.5	9.5	8.5	9	45	9	10	9.5	10	10	9.5	49	9.8	3	2.5	3	2.5	3	14	2.8	9	9.5	8.5	9.5	8.5	45	9	4	3.5	4	3.5	4	19	3.8				
Job-E	5	5.5	5	5.5	5	26	5.2	4	4	4	4	4	20	5	9	8.5	9	8.5	9	44	8.8	6	6	6	6	6	30	6	3.5	3.5	3.5	3.5	3.5	17.5	3.5				
Job-P	9	9	8	9	9	44	8.8	9	9	8.5	9	8.5	44	8.8	5	7	5	7	5	39	7.8	9	8	9	8	9	43	8.6	3.5	3.5	3.5	3.5	3.5	17.5	3.5				
Job-T	2	2	3	2	3	12	2.4	3	3	4	3	4	17	3.5	3	3.5	3.5	3	3	16	3.2	3	3	2.5	2.5	3	14	2.8	1	1	1	1	1	5	1.0				
Job-V	1	1	1	1	1	5	1	2	2	2	2	2	10	2	5	5	5	5	5	25	5	1	2	2.5	2.5	2	10	2	6.5	6.5	6.5	6.5	6.5	32.5	6.5				
Job-X	4	4	3	4	3	18	3.6	6	7	6	6	6.5	31.5	6.3	5	6	5	6	5	27	5.4	4	4.5	4	4	4.5	21	4.2	6.5	6.5	6.5	6.5	6.5	32.5	6.5				
Job-Z	3	3	3	3	3	15	3	1	1	1	1	1	15	1	2	2	2	2	2	10	2	2	1	1	1	1	6	1.2	6.5	6.5	6.5	6.5	6.5	32.5	6.5				
Job-1B	6	5.5	7	5.5	6	30	6	8	8	8.5	8	8.5	41	8.2	1	1	1	1	1	5	1	8	8	8	8	8	40	8	2	2	2	2	2	10	2				
Job-1D	7	8	6	8	7	36	7.2	5	5	4	5	4	23	4.6	8	8.5	8	8.5	8	41	8.2	5	4.5	5	5	4.5	27	4.8	9	9	9	9	9	45	9				
Job-1F	8	7	9	7	8	39	7.8	7	6	7	7	6.5	33.5	6.7	4	3.5	3.5	4	4	19	3.8	7	8	7	8	7	37	7.4	6.5	6.5	6.5	6.5	6.5	32.5	6.5				

FIG. 9. FACTOR RANKS ASSIGNED TO NON-KEY JOBS

Salary Scale	Job	Salary Scale	Job	Salary Scale	Job	Salary Scale	Job	Salary Scale	Job
250		200		150		100	Job-B*	50	
245		195		145		95		45	
240		190		140	Job-E	90	Job-X	40	
235		185		135	Job-V	85		35	
230		180		130	Job-T	80	Job-Y	30	Job-G* Job-OP, LG Job-K Job-F* Job-N* Job-M* Job-L*
225		175		125	Job-U	75	Job-1A Job-C* Job-D* Job-H* Job-I* Job-1B	25	
220		170		120		70	Job-1C Job-1D	20	Job-Q*
215		165	Job-A*	115	Job-W	65		15	
210		160		110	Job-Z	60	Job-1E Job-J*	10	
205		155	Job-R	105		55	Job-1F	5	

FIG. 10. JOB COMPARISON SCALE FOR MENTAL REQUIREMENTS

Salary Scale	Job	Salary Scale	Job	Salary Scale	Job	Salary Scale	Job	Salary Scale	Job
\$250	Job-A*	\$200	Job-R,Z	\$150		\$100	Job-1C	\$50	Job-1F
245		195		145		95		45	Job-G*
							Job-E		Job-Q* Job-1P Job-J*
240		190	Job-V	140		90		40	
									Job-K Job-F* Job-OP,1G
235		185		135		85	Job-1A	35	
									Job-N* Job-M* Job-L*
230		180		130		80		30	
225		175		125	Job-B*	75	Job-1D	25	
220	Job-E	170		120	Job-T	70		20	
					Job-W Job-U		Job-C* Job-X Job-D* Job-H*		
215		165		115		65		15	
					Job-Y				
210		160		110		60	Job-I*	10	
							Job-1E		
205		155		105		55		5	

FIG. 11. JOB COMPARISON SCALE FOR SKILL REQUIREMENTS

Salary Scale	Job	Salary Scale	Job	Salary Scale	Job	Salary Scale	Job	Salary Scale	Job
\$125		\$100		\$ 75		\$ 50		\$ 25	Job-I*
									Job-H*
									Job-J*
									Job-P
120		95		70		45	Job-Q*	20	
115		90		65		40	Job-K	15	
							Job-N*		
							Job-1E1B		
							Job-QP1G		
							Job-1F,T		
							Job-Z,C*		
110		85		60		35	Job-Y,A*	10	
							Job-U,1C		
							Job-W		
							Job-V		
							Job-G*		
							Job-D*		
							Job-X		
105		80		55		30	Job-B*	5	
							Job-1A		
							Job-S		
							Job-F*		
							Job-1D		
							Job-F,M*		
							Job-L*		

FIG. 12. JOB COMPARISON SCALE FOR PHYSICAL REQUIREMENTS

Salary Scale	Job	Salary Scale	Job	Salary Scale	Job	Salary Scale	Job	Salary Scale	Job
250		200		150		100	Job-W	50	Job-E
									Job-1F
245		195		145		95		45	Job-1E
240		190		140		90	Job-T	40	
235		185		135	Job-R	85		35	
									Job-1V
230		180		130	Job-S	80		30	Job-G*
									Job-J*
							Job-X		Job-F*
225		175		125	Job-Z	75		25	Job-OP1G
									Job-G*
									Job-M*
220		170		120	Job-V	70		20	Job-N*
					Job-B*		Job-1C		Job-K
									Job-L*
215	Job-A*	165		115		65		15	
210		160		110		60	Job-C*	10	
							Job-1D		
205		155		105		55	Job-D*	5	
							Job-H*		
							Job-U		
							Job-I*		
							Job-1A		
							Job-Y		

FIG. 13. JOB COMPARISON SCALE FOR RESPONSIBILITY

Salary Scale	Job	Salary Scale	Job	Salary Scale	Job	Salary Scale	Job	Salary Scale	Job
\$125		\$100		\$ 75		\$ 50		\$ 25	Job-1E2 Job-VJ* Job-I*
									Job-D* Job-Y,S Job-1D
120		95		70		45	Job-R	20	
115		90		65		40	Job-U	15	
							Job-Q*		
110		85	Job-A*	60		35	Job-C*	10	
							Job-K Job-L* Job-H* Job-1B Job-M*		
105		80		55	Job-T	30	Job-N*	5	
							Job-E,1G Job-O*,P Job-F* Job-1C Job-B* Job-1A,W Job-1EG*		

FIG. 14. JOB COMPARISON SCALE FOR WORKING CONDITIONS.

	Mental Requirements	Skill Requirements	Physical Requirements	Responsibil- ity	Working Conditions	Total Eval- uated Salary	Present Salary	Plus or Minus
Job-A	165	250	35	215	85	750 x	750	
Job-B	100	125	30	118	27	400 x	400	
Job-C	75	68	36	61	35	275 x	275	
Job-D	74	66	32	56	22	250 x	250	
Job-E	78	92	27	50	29	276	300	M24
Job-F	29	38	28	27	28	150 x	150	
Job-G	32	45	33	24	26	160 x	160	
Job-H	73	65	21	55	22	220 x	220	
Job-I	72	61	25	53	24	235 x	235	
Job-J	61	42	23	29	25	180 x	180	
Job-K	30	39	40	18	34	161	150	P11
Job-L	26	32	26	17	34	135 x	135	
Job-M	27	33	27	22	31	140 x	140	
Job-N	28	34	38	20	30	150 x	150	
Job-O	31	37	37	26	29	160 x	160	
Job-P	31	37	37	26	29	160	160	
Job-Q	20	44	45	30	36	175 x	175	
Job-R	155	200	21	135	45	556	550	P6
Job-S	140	220	29	130	21	540	550	M10
Job-T	130	120	36	90	55	431	350	P81
Job-U	125	117	35	54	40	371	350	P21
Job-V	135	190	33	120	25	503	750	M247
Job-W	115	118	34	100	26	393	400	M7
Job-X	90	67	31	77	25	290	300	M10
Job-Y	83	113	35	51	25	307	300	P7
Job-Z	110	200	36	125	25	496	550	M54
Job-1A	76	85	30	52	26	269	300	M31
Job-1B	71	43	37	32	32	215	260	M45
Job-1C	70	100	35	68	27	300	250	P50
Job-1D	68	75	27	59	21	250	250	
Job-1E	62	58	37	45	26	228	225	P3
Job-1F	55	50	36	48	25	214	190	P24
Job-1G	31	37	37	26	29	160	160	
GRAND TOTAL.....						\$9,530.....	\$9,755.....	M225

FIG. 15. COMPARISON OF EVALUATED SALARY AND PRESENT SALARY PER JOB.

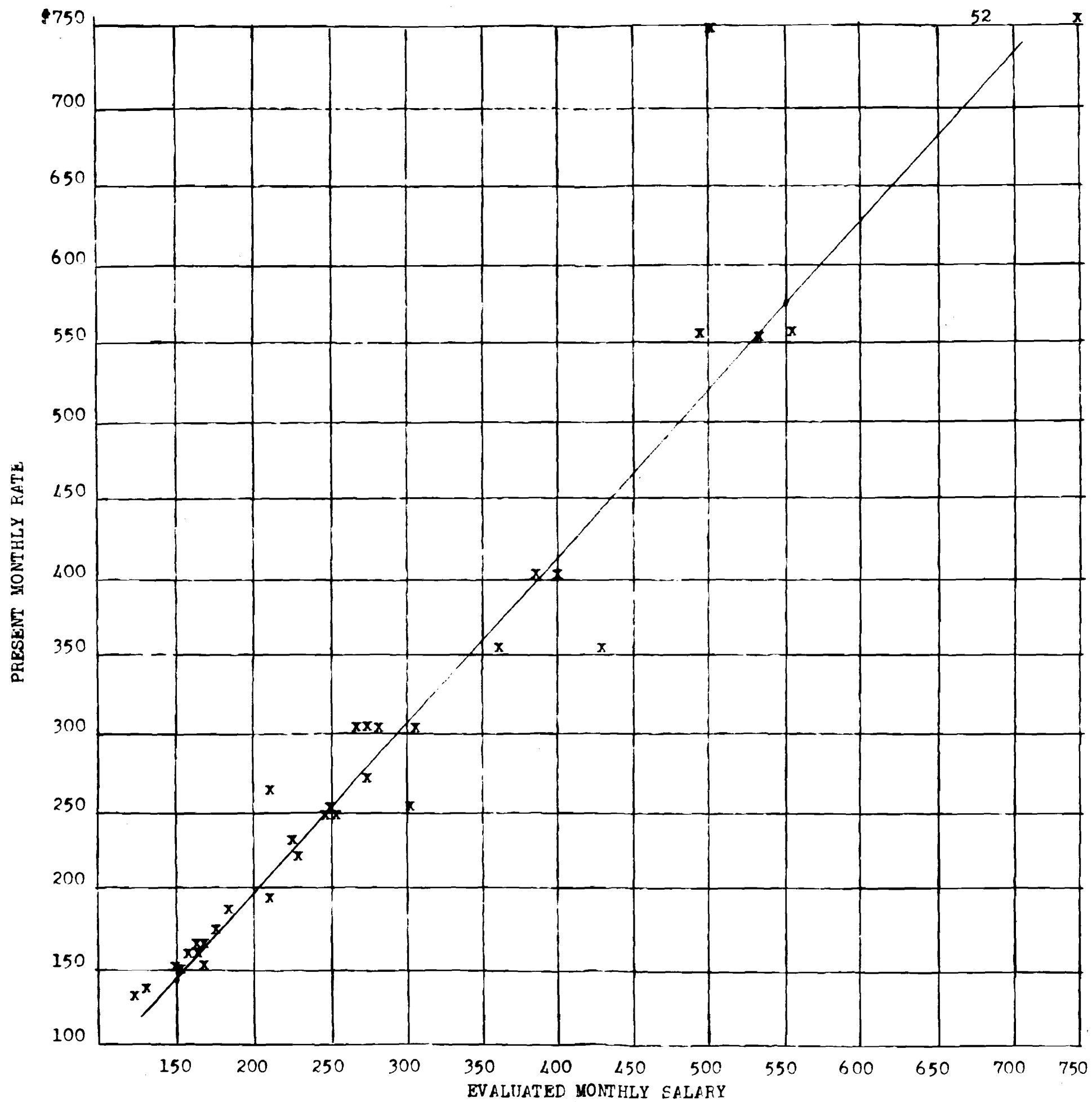


FIG. 16. SCATTER DIAGRAM OF EVALUATED SALARY AND PRESENT SALARY WITH TREND LINE.

APPENDIX B

JOB DESCRIPTION

Job-A

Job Title	Vice Pres. in Charge of Sales	Date
Department	Sales	Analyst

FUNCTION Directs activity of sales and service.

DUTIES

1. Plans activity of sales department.
2. Carries on correspondence with Sales Managers concerning Sales and Service problems.
3. Supervises receipt and processing of orders.
4. Promotes sales through jobbers by means of correspondence and personal visits.
5. Supervises keeping of sales and bonus records.
6. Promotes sales activity by means of house organ, contests, bonuses, etc.
7. Supervises activity of Service Department.
8. Consults with other company officers concerning plan, policies, sales goals, etc.
9. Visits and works with territory sales managers increasing sales, improving sales methods and training salesmen.

JOB DESCRIPTION

Job-B

Job Title Planning Engineer DateDepartment Engineering Analyst

FUNCTION Plans and schedules work through machine shop and assembly department, supervises material control, Parts Department and Receiving Department, prepares various reports concerning production and material control, keeps records of capital equipment, designs forms and factory systems, plans, creates, and supervises education of standard procedures for personnel, material and methods.

DUTIES

1. Supervises activity of Scheduling and Planing, Parts and Receiving Departments and Material Control.
2. Supervises preparation of weekly reports concerning status of parts production, hours behind schedule, etc.
3. Keeps record and patterns and machinery.
4. Designs factory forms and systems.
5. Performs various staff functions such as Job Analysis and Job Chairman of Suggestion Committee.
6. Supervises activities of time study engineer.
7. Plans and recommends:
 - a. Time and method standards
 - b. Material standards
 - c. Material handling standards
 - d. Inspection standards

JOB DESCRIPTION

Job-C

Job Title Time Study Engineer DateDepartment Analyst

FUNCTION Prepares for and takes time and motion study for purpose
 of maintaining record and control of production.

DUTIES

Daily:

1. Supervises preparation for and takes all time studies for machine and assemble jobs.
2. Study and recommend inification of
 - a. Machining Standards.
 - b. Material handling Standards.
3. Devise and make reports on:
 - a. Daily employee production performance
 - b. Periodic employee production performance
 - c. Job Production performance.
4. Analyze and coordinate methods and processes.
5. Special staff assignments.

JOB DESCRIPTION

Job-D		
Job Title	Office Manager	Date
Department	Treasury	Analyst

FUNCTION Directs office personnel, coordinate the personnel of various departments. Supervises office service such as telephone, teletype, duplicating, mailing, filing and stationery supply. Determines detail of office policy on physical property of personnel.

DUTIES

1. Confers with office personnel on problems.
2. Places orders for stationery supplies and office equipment. Keeps inventory on these also. Handles repair of these.
3. Reviews, enters account numbers and approves all invoices.
4. Orders credit report and routes report to proper person.
5. Directs special mailing.
6. Supervises telephoen, teletype, duplicating, mailing and filing function either directly of theouth supervisors.
7. Interviews, hires and recommendshiring of office personnel.
8. Assigns additional personnel to department when needed.
9. Carries out special as. ignments as requested.

FUNCTION Under supervision of industrial engineer, prepares drawings, sketches, of machines parts, castings, production layouts, operation drawings and other blue prints, maintains file of drawings.

1. Draws finished organization charts.
2. Paints signs.
3. Makes illustration drawings for advertising.
4. Knows maps and parts of building structure.
5. Photograph meetings, individuals and machines.

JOB DESCRIPTION

Job-F

Job Title Receptionist & Telephone OperatorDepartment General Office Analyst

FUNCTION Receives callers and notifies proper persons.
Answers all incoming, outgoing and interoffice telephone calls.
Operates teletype and does miscellaneous typing.

DUTIES

Daily:

1. Opens and distributes mail.
2. Answers all incoming calls. Makes interoffice and outside connections.
3. Receives callers and refers to proper persons or gives information.
4. Types acknowledgements on Auto-Soler orders.
5. Maintains customer cards and sends service material to new customers and to customers buying used machines.
6. Keeps record of long distance calls and telegrams.

JOB DESCRIPTION

Job-G

Job Title Senior ClerkDateDepartment AccountingAnalyst

FUNCTION Posts details of machine sales to various records, keeps, various records and writes collection form letters, takes dictation and transcribes letters.

DUTIES

1. Supervises all clerks in accounting department.
2. Balances Accounts Receivable Journal and makes up customers monthly statements for machines, wire and parts.
3. Makes up statement of salesmen's commissions.
4. Assists supervised employees in miscellaneous accounting functions.

JOB DESCRIPTION

Job-H

<u>Job Title</u>	<u>Senior Cost Clerk</u>	<u>Date</u>
<u>Department</u>	<u>Engineering</u>	<u>Analyst</u>

FUNCTION Under general supervision, maintains records of direct factory labor and material cost and prepares monthly reports on same. Initials production orders, maintains kardex stock record, of name factured and purchased parts.

DUTIESDaily:

1. Receives vendor invoices from Purchasing Department and post data to material journal.
2. Posts data from material journal to material ledger and extends new cost of material.
3. Receives bills of material and production orders after material is delivered, prices material from material ledger, extends new balance, records in material control journal, posts total to material ledger.
4. Receives completed production orders from technical clerk, records quantities in material journal, posts from journal to ledger, extends balance and unit cost, posts total to material control card.
5. Receives and files inventory cards mady by Parts Department each time a requisition is placed for parts or material.

Periodic:

1. Consolidates figures for production of machines and subassemblies for the month, prices and extends.
2. Totals daily wire production reports for month.
3. Secures labor cost from technical clerk and combines with material cost.
4. Secures totals of material received, produced, used and sold from records.
5. Consolidates above into monthly reports.
6. Posts billing sheets for month's production to reduce manufactured parts, purchased parts and raw material inventories.

JOB DESCRIPTION

Job-I
Job Title Bookkeeper Date
Department Accounting Analyst

FUNCTION

Posts various enteries to cash receipts, cash disbursements and Generl Journas and the General Ledge. Makes up profit and loss and Financial Statements.

DUTIES

1. Checks Sales invoices and compares with enteries on Sales Journal.
 2. Picks up Commission Certificates and checks against records. Checks Installment Commission against installment back.
 3. Compiles Salesmen's Salaries and expenses.
 4. Posts enteries to Cash Receipts, cash disbursements, General Journal. Posts enteries to General Ledger and balances General Ledge.
 5. Checks Sales Journal and balances with machine, wire and parts sales.
- Periodic:
1. Compiles reports on profit and loss.
 2. Compiles Financial Statement.

JOB DESCRIPTION

Job-J
Job Title Accounting Clerk Date
Department Accounting Analyst

FUNCTION Posts various enteries in Account Receivable Journal, Sales Journal, Cash Receipts Journal. Makes up customers monthly statements and salesmen's statement for wire and parts sales.

DUTIES

1. Posts all wire and parts sales to Sales Journal.
 2. Posts all sales journal enteries to Accounts Receivable Journal.
 3. Posts Cash Receipts to Cash Receipts Journal.
 4. Post Cash Receipts and General Journal enteries to Accounts Receivable Journal.
 5. Completes enteries on wire and parts sales invoices. Types date, postage and shipping date on invoice. Enters Salesmens' Commission on Accounting Department Copy.
 6. Pays freight bills, inspects to see that account number appears on bill, writes check covering bills.
 7. Writes checks for part of Accounts Payable by 10th of each month.
- Periodic:
1. Balances Accounts Receivable Journal and makes up customers monthly statements for wire and parts.
 2. Buys War Savings Bonds for employees each Monday.
- Occasional Duties:
1. May assist in other accounting functions from time to time.

JOB DESCRIPTION

Job-K

<u>Job Title</u>	<u>Mail and File Clerk</u>	<u>Date</u>
<u>Department</u>	<u>Mail and File</u>	<u>Analyst</u>

FUNCTION

Under general supervision, arranges and files various material. Weighs letters, packages, etc., ditto machine. Collects and delivers mail.

DUTIES

Daily:

1. Separates material to be filled into various classifications and files material.
2. Weighs letters, packages, etc., and place proper postage by operating postage machine.
3. Operates ditto machine.
4. Picks up mail several times during each day.
5. Answer telephone inquiries for information in files.

Occasional:

1. Operates mimeograph machine.

JOB DESCRIPTION

Job-L
Job Title Transcribing Machine Operator Date _____
Department Sales Analyst _____

FUNCTION Transcribes dictated matter using transcribing machine and typewriter. Performs miscellaneous typing operations.

DUTIES

Daily:

1. Transcribes cylinders using transcribing machine and typewriter.
2. Acknowledges Sales
3. Notifies salesmen of shipments, demonstration charged, etc.
4. Types up invoices and details of machine sales.

Periodic:

1. Types shipping schedule, reports of machines on hand, etc.
2. Types weekly and monthly reports.

JOB DESCRIPTION

Job-M

Job Title	Steno--Typist	Date
Department	Export	Analyst

FUNCTION Transcribes shorthand notes and dictaphone records.
Files correspondence. Prepares invoices.

DUTIES

Daily:

1. Transcribes shorthand notes and dictaphone records for Export Department and other departments.
2. Addresses envelopes and writes form letters.
3. Prepares invoices from prepared foreign orders. Tabulation. Prepares Shipper's Export Declaration.
4. Files all material for Export Department.

JOB DESCRIPTION

Job-N
Job Title General Office Clerk Date
Department Purchasing Analyst

FUNCTION Types Purchase Orders from prepared requisitions, transcribes letters from dictaphone to typewriter, cuts stencils and runs on ditto or mimeograph machine.

DUTIES

Daily:

1. Types purchase orders using prepared requisitions.
2. Transcribes letters from dictaphone records using typewriter.
3. Cuts ditto or mimeograph stencils on typewriter.
4. Runs off ditto or mimeograph stencils on those machines.
5. Keeps up stock of stationery and supplies for use of office.
6. Files purchase orders, catalogue and correspondence.

Periodic:

1. Relieves switchboard operator for rest period.

JOB DESCRIPTION

Job-0		
Job Title	Secretary	Date
Department	Engineering	Analyst

FUNCTION

Takes and transcribes dictation. Types statistical reports. **Arranges** for duplicating work to be done. Makes mathematical calculations on Time Studies.

DUTIES

Daily:

1. Takes and transcribes dictation.
2. Transcribes Dictaphone records writing correspondence involving Engineering terms.
3. Makes appointments and takes messages for Industrial Engineer.
4. Cuts stencils for duplicating.
5. Makes mathematical calculation on time study data sheets.

JOB DESCRIPTION

Job-P

Job Title	Secretary of Production	Date
Department	Production	Analyst

FUNCTION Takes dictation and transcribes. Writes Auto-Nailer Requisition and all shipping letters. Keeps miscellaneous personnel records.

DUTIES

Daily:

1. Takes and transcribes dictation using shorthand and typewriter.
2. Receives, marks and distributes departmental mail.
3. Fills out compensation claims on injured employees.
4. Maintains hospitalization and group insurance records for all employees.
5. Writes up requisition for Auto-Nailer and writes shipping letters on all machines shipped.
6. Maintains record of wage changes, address, etc., on factory employees.

Periodic:

1. Makes new list of employee every two months.
2. Makes insurance reports monthly.

JOB DESCRIPTION

Job-Q

Job Title	Receiving Clerk	Date
Department	Parts	Analyst

FUNCTION

Receives all deliveries, checks condition and count of goods. Stores goods received or takes to proper department. Cuts up steel stock on Raw Material Requisition Orders. Delivers orders for raw material to floor.

DUTIESDaily:

1. Receives all goods delivered to company. Checks physical condition of packages and makes physical count of shipment. Makes our receiving memorandum and sends copy to inventory control records.
2. Sends or takes goods received to proper place.
3. Stores castings and raw materials in department.
4. Posts bin cards to keep perpetual inventory of castings in stock.
5. Operates Power Hack Saw to cut steel stock into required lengths on Raw Material Requisition.
6. Delivers raw stock, cut stock and castings to production floor,
7. Supervises helper in performance of the above functions.

Periodic:

1. Takes physical inventory of stock in department.

JOB DESCRIPTION

Job-R

Job Title Vice President -Manufacturing DateDepartment Production Analyst

FUNCTION Responsible for the direction and supervision of the Purchasing Engineering Shop. Shippand Part of Customer Service Departments. Acts with committee of company officers to determine company policy. Responsible for accomplishing the production program within the company budget.

DUTIES

1. Consults with departmentheads in planning. Scheduling and accomplishing the production program.
2. Dictates correspondence relative to production function.
3. Functions, with committee of officers, to determine company policy.
4. Investigates new production ideas, discusses with officers, department heads, staff employees.

JOB DESCRIPTION

Job-S

Job Title Industrial Engineer DateDepartment Engineering AnalystFUNCTION

Plans, creates and supervises execution of scientific management for the factory. Handles factory correspondence and patent matters.

DUTIES

1. Supervises the activities of Cost, Planning and Scheduling, drafting, Parts and Receiving Departments.
2. Dictates correspondence for all factory departments.
3. Handles patent matters, protecting present patents and securing new patents on new ideas, designs and developments.
4. Plans and supervises construction and alteration of buildings.
5. Consults with others on new product design.
6. Interviews department heads to secure information for improving overall operation of the factory.
7. Helps to form company policies and sees that those policies are carried out as they effect the Engineering Department.
8. Supervises Job Evaluation program.

JOB DESCRIPTION

Job-T

Job Title Assistant to Vice President Date _____
 of Sales

Department Sales Analyst _____

FUNCTION Under general supervision, writes sales and service letters, assembles data for shipping goods, selects and writes copy for sales house organ.

DUTIES

Daily:

1. Check machine sales received, routes to proper people for processing.
2. Dictates Sales letters to propects,
3. Dictates service letters to customers.
4. Keeps perpetual inventory of machines on hand and makes up tentative production order.
5. Supervises detail of Service Department and two clerk typing letters, invoices, etc.
6. Checks correspondence before signing.
7. Releases machine Sales to Shipping Department after processing is completed.

Occasional Duties:

1. Takes charge of Sales Department in absence of supervisor.

JOB DESCRIPTION

Job -U
Job Title Advertising Manager Date
Department Advertising Analyst

FUNCTION

Directs Company's advertising program. In charge of Sales of Auto-Nailers.

DUTIES

1. Selects and buys advertising space.
2. Supervises preparation of advertising copy and lay out.
3. Buys art, photograph, engraving, printing, etc.
4. Dictates Auto-Nailer Sales Correspondence.
5. Advises Salesmen on Auto-Nailer Sales activity.
6. Prepares Instruction Manuals.
7. Performs various special assignments for President.
8. Supervises preparation of Auto-Nailers Order. Supervises various mailings.

JOB DESCRIPTION

Job-V

<u>Job Title</u>	<u>Secretary & Treasurer</u>	<u>Date</u>
<u>Department</u>	<u>Treasury</u>	<u>Analyst</u>

FUNCTION Directs and supervises the company's financial activity, the keeping of company financial records and the office activity.

DUTIES

1. Assigns various duties to department heads under supervision.
2. Consults with department heads in obtaining better results and checking accomplishment.
3. Acts on committee of executives in formulation of financial policy for the company.
4. Supervises through office manager the office Services Department.
5. Keeps corporate seal and maintains records of meetings of Board of Directors. Performs other corporate secretarial duties.

JOB DESCRIPTION

Job-W

Job Title	Export Manager	Date
Department	Export	Analyst

FUNCTION Sells company's product to foreign agents. Dictates sales correspondence. Shipping and Service letters. Supervises Shipping and invoicing of order.

DUTIES

1. Writes Sales, shipping, and service letters.
2. Keeps record of orders on hand, requisition machines to fill orders, Furnish Date to Shipping Department.
3. Checks shipping document for correctness. Completes details on invoices, prepare documents for drafts.
4. Supervise Secretary writing letters and doing other jobs.
5. See that trade reports are ordered to secure trade information on prospective agents.
6. Compiles export of actual sales as compared with budgeted Sales for each month.
7. Reviews export books, magazines, etc. Searches for better methods of selling and distributing.

JOB DESCRIPTION**Job-X**

Job Title	Comptroller	Date
Department	Accounting	Analyst

FUNCTION Plans designs, developes and supervises the accounting system. Audits internal books and other transaction. Prepares financial statements, budget analysis and other reports for management.

DUTIES

1. Audits Accounts daily for accuracy and for possibility or improving system.
2. Checks incoming and outgoing invoices daily for accuracy and account numbers.
3. Checks salesmen's statements for accuracy.
4. Prepares various management control reports such as financial statements, budget analysis.
5. Supervises general accounts and accounts receivable.
6. Performs special duties for Treasurer as required.

JOB DESCRIPTION

Job-Y

Job Title	Purchasing Agent	Date
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Department	Purchasing	Analyst
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FUNCTION

Purchases material, supplies and tools or approved Material Requisition.

DUTIES

Daily:

1. Receives approved Material Requisition
2. Edits requisition and has Purchase Order Typed.
3. Proof reads Purchase Order, Signs and marts.
4. Contacts Suppliers by phone and mail finding scarce items and new items and to expedite deliveries.
5. Checks, audits and approves invoices after goods are received.

Occasional:

1. Files claims for loss or damaged incoming shipments.

JOB DESCRIPTION

Job-Z
Job Title General Factory Superintendent
Department Analyst

FUNCTION Supervises department under his authority --- machine shop, research department, Tooling department, maintenance department, building and grounds, and wire knurling department.

DUTIES

1. Responsible for maintaining factory production at required levels.
2. Coordinates all activities within the shop.
3. Makes numerous minor decisions as to production procedures, etc.
4. Specifies companies with whom orders are to be placed.
5. Miscellaneous supervisory functions connected with the entire machine shop.

JOB DESCRIPTION

Job-IA		
Job Title	Assistant Treasurer	Date
Department	Credit	Analyst

FUNCTION Under general supervision, supervises keeping of Machine Sales Records, Machine Accounts Receivable, GOP Commission records. Collects past due accounts, makes up bank deposit and sight drafts.

DUTIES

1. Supervises clerk keeping record of machines sold. Posting machine Sales to machineaccounts. Receivable Accounts, GOP Commission records and issuing of checks.
2. Dictates correspondence to customers concerning payments on machines.
3. Dictates correspondence to salesmen regarding past due accounts.
4. Keeps record of cash receipt and deposits, makes up bank deposit.
5. Makes up Sight Drafts and handles discounting of customer notes.
6. Examines and passes on Title Retention Notes. Has notes recorded after shipment of machine.
7. Performs any other duties assigned by Treasurer.

JOB DESCRIPTION

Job-IB
Job Title Schedule & Time Clerk Date
Department Engineering Analyst

FUNCTION Under supervision, processes Production Orders, writes bill of material. Schedules production of parts in shop on Schedule Board. Posts daily production from inspection cards to job cards. Prices and extends labor cost on Job Cards. Posts time and labor dollars on work in progress. Maintains file of Job and Inspection cards until Production Orders are completed. Computes time report for weekly payroll.

DUTIES

Daily:

1. Processes Production Orders by writing in material required or filling out Finished Parts Bill of Material.
2. Makes up schedule and inserts in Schedule Board. Posts daily production to schedule cards from Job Inspection cards. Posts production to Job Cards.
3. Prices and extends time expended on Job Cards daily. Posts time and labor dollars expended to Work in Progress accounts.
4. Files Job Cards and Finished Parts Bills of Material in Work in Progress file.
5. Receives Production Orders, pulls Job Cards and summarizes to arrive at total labor cost for Production Order.
6. Credits time and labor dollars to Work in Progress account on each Production Order.

JOB DESCRIPTION

Job-IC

Job Title Manager Parts Department DateDepartment Analyst

FUNCTION Under direct supervision, supervises receipt, storage, disbursement and contact of raw material and finished parts.

DUTIES

Daily:

1. Receives and makes receiving memorandums on all parts manufactured or bought. Has parts placed in stock.
2. Fills or supervises filling of bills of material and delivers to production floor. Posts all of above to transactions to kardex record.
3. Fill orders for parts and service items.
4. Supervises one kardex record clerk and three material clerks.

Periodic:

1. Weekly, takes and reports on inventory of motors and motor units.

JOB DESCRIPTION

Job-ID

Job Title	Service Manager	Date
Department		Analyst

FUNCTION Handles miscellaneous correspondence for repairs, executes paper work for repair of machines and component parts. Directs writing of invoices for replacement parts to customers.

DUTIES

1. Maintains correspondence with customers requiring service of machines.
2. Makes decisions as to repairs that are needed by customers.
3. Supervises repairs either personally or through literature.
4. Maintains records of all services rendered.

JOB DESCRIPTION

Job-IE
Job Title Manager Mail & File Dept. Date
Department Mail & File Analyst

FUNCTION

Supervises and performs filing, mailing, and addressing functions.

DUTIES

Daily:

1. Receives mail and filing material.
2. Assigns work to file clerks or performs work.
3. Makes addressograph plates on graphotype.
4. Runs off various lists on addressograph machine.
5. Answers inquires from various department giving out information over telephone of forwarding file to department.
6. Makes up records on each machine that is sold.

Periodic:

1. Report on mail posted
2. Report on files handled

Occassional Duties:

1. Runs off special lists.

JOB DESCRIPTION

Job-IF

Job Title Shipping Superintendent DateDepartment AnalystFUNCTION

Supervises invoices, packing and shipping of products.

DUTIES

1. Ships all goods for company. Rechecks all goods to be shipped. Makes out shipping memorandums.
2. Responsible for proper storage of goods prior to shipment.
3. Keeps records of all out going, machines, parts and wire.
4. Operates some materials handling equipment.

JOE DESCRIPTION

Job-IG

Job Title Secretary of Sales DateDepartment Sales Analyst

FUNCTION Takes dictation with shorthand, transcribes shorthand notes and dictaphone cylinders, keeps various sales records.

DUTIES

Daily:

1. Takes dictation in shorthand, transcribes shorthand notes or dictaphone records.
2. Keeps various sales records such as scoreboard, bandwagon, etc.
3. Takes care of routine inquiries.
4. Keeps record of Sales.

Periodic:

1. Makes Sales report monthly.
2. Makes up GOP Expectancy reports.
3. Makes up weekly and monthly recaps for salesmen.

APPENDIX C

JOB SPECIFICATION

Job-A

Job Title **Vice.-Pres. in charge of Sales** Date **88**

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education **Degree in Business Administration** Special Education

Kind of Work Knowledge

Knowledge of company products, policies. General knowledge of economic trends, market trends of shoe repair, wood working and related business.

Instructs Others	<u>X</u>	Close Cooperation	<u>X</u>
High Intelligence	<u>X</u>	Close Concentration	<u>X</u>
Logical Reasoning		Facility in	
Emotional Stability	<u>X</u>	Verbal Expression	<u>X</u>

SKILL

Kind or Type **Directs activities of sales and service. Department training of salesman, coordinating sales with other companies.**

Functions, handling employees; uses dictaphone; company machines.

Time for Inexperienced Worker to Learn Job **5 years**

To Adapt to Our Methods **1yr** Desirable Prior Experience **Supervisory--**

Leadership	<u>XX</u>	Judgment	<u>XX</u>	Sales
Initiative	<u>XX</u>	Independent		
Creative Effort		Decisions	<u>XX</u>	

PHYSICAL REQUIREMENTS

Nature of Physical Effort **Clerical, Supervisory**

Very Active Work	<u>X</u>	Great Strength	
Walking	<u>20</u> %	Much Fatigue	
Standing	<u>20</u> %	Repetitive	
Sitting	<u>60</u> %	Varied	<u>X</u>
Other, Specify		Intermittent	
Age Limits <u> </u> to <u> </u>		Minimum Weight	

RESPONSIBILITY

Kind of Equipment, Tools or Materials

Dictaphone, reference books and finished products of company.

For Supervision Given **Much** For Supervision Received **Little**

For Contacts with:

Employees	<u>X</u>	Vendors	<u>X</u>
Officers of Co.	<u>X</u>	Public	<u>X</u>
Customers	<u>X</u>	Records	

Other Responsibilities:

Producing sales in accordance with sales records and budgets; many decisions effecting costs. Great amount of tactfulness.

WORKING CONDITIONS

Place	Inside & Out	Noise	<u>X</u>
Type	Executive-Clerical	Aggestion	
Illumination	<u>Good</u>	Surroundings	<u>Good</u>
Travel, Specify	<u>Extensive</u>	Hazards, Specify	

JOB SPECIFICATION

Job-B

Job Title Standards & Planning Engineer Date _____

89

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education 2 years college

Special Education _____

Kind of Work Knowledge General knowledge of standards, scheduling, materials handling, etc.

Instructs Others _____	Close Cooperation _____	<u>x</u>
High Intelligence _____	Close Concentration _____	<u>x</u>
Logical Reasoning <u>x</u>	Facility in _____	<u>x</u>
Emotional Stability <u>x</u>	Verbal Expression _____	

SKILL

Kind or Type Ability to plan, create and supervise execution of standards. Ability to efficiently schedule production.

Time for Inexperienced Worker to Learn Job 2 yrs.

To Adapt to Our Methods 1 yr Desirable Prior Experience Supervisory

Leadership <u>x</u>	Judgment _____
Initiative <u>x</u>	Independent _____
Creative Effort <u>x</u>	Decisions <u>x</u>

PHYSICAL REQUIREMENTS

Nature of Physical Effort Clerical

Very Active Work <u>x</u>	Great Strength _____
Walking <u>10</u> %	Much Fatigue _____
Standing <u>10</u> %	Repetitive _____
Sitting <u>80</u> %	Varied _____
Other, Specify _____ %	Intermittent _____
Age Limits <u>25</u> to <u>60</u>	Minimum Weight _____

RESPONSIBILITY

Kind of Equipment, Tools or Materials

All materials in process of production.

For Supervision Given Much For Supervision Received Little

For Contacts with:

Employees <u>x</u>	Vendors <u>x</u>
Officers of Co. <u>x</u>	Public _____
Customers <u>x</u>	Records <u>x</u>

Other Responsibilities:

Many decisions affecting costs. Schedule and planning records, weekly reports, records of machinery and freight. Staff functions, damage claims. Acts as job analyst and chairman of suggestion committee.

WORKING CONDITIONS

Place <u>Inside</u>	Noise <u>x</u>
Type <u>Clerical</u>	Congestion _____
Illumination <u>Good</u>	Surroundings <u>Pleasant</u>
Travel, Specify _____	Hazards, Specify _____

Job-C

JOB SPECIFICATION

Job Title Time Study Engineer

Date

(Use (X) to indicate, (XX) to stress)

90

MENTAL REQUIREMENTS

Education 2 years of college Special Education

Kind of Work Knowledge

Knowledge of some industrial engineering work, especially time and motion study. Knowledge of material handling methods and equipment.

Instructs Others	<u>X</u>	Close Cooperation	<u>X</u>
High Intelligence	<u>X</u>	Close Concentration	<u>X</u>
Logical Reasoning	<u> </u>	Facility in	<u> </u>
Emotional Stability	<u> </u>	Verbal Expression	<u>X</u>

SKILL

Kind or Type Ability to make time and motions studys, micromotion studies, set standards, etc.

Time for Inexperienced Worker to Learn Job 1 year.

To Adapt to Our Methods	<u>6mo</u>	Desirable Prior Experience	<u>Time</u>	Study
Leadership	<u> </u>	Judgment	<u>X</u>	Worl
Initiative	<u>X</u>	Independent	<u> </u>	
Creative Effort	<u>X</u>	Decisions	<u> </u>	

PHYSICAL REQUIREMENTS

Nature of Physical Effort Semi-Clerical

Very Active Work	<u> </u>	Gréat Strength	<u> </u>
Walking	<u>15 %</u>	Much Fatigue	<u> </u>
Standing	<u>15 %</u>	Repetitive	<u> </u>
Sitting	<u>70 %</u>	Varied	<u> </u>
Other, Specify	<u> </u>	Intermittent	<u> </u>
Age Limits <u>20</u> to <u>60</u>		Minimum Weight	<u> </u>

RESPONSIBILITY

Kind of Equipment, Tools or Materials Some photographic equipment, stop watch, time study forms, micrometer.

For Supervision Given Much For Supervision Received Much

For Contacts with:

Employees	<u>X</u>	Vendors	<u> </u>
Officers of Co.	<u>X</u>	Public	<u> </u>
Customers	<u> </u>	Records	<u> </u>

Other Responsibilities:

Reports on employees, staff assignments, records of time studies, performance, productions and standards.

WORKING CONDITIONS

Place	<u>Inside</u>	Noise	<u>X</u>
Type	<u>Clerical</u>	Congestion	<u>X</u>
Illumination	<u>Fair</u>	Surroundings	<u>Poor</u>
Travel, Specify	<u> </u>	Hazards, Specify	<u>X</u>

JOB SPECIFICATION

Job D

Job Title Office Manager

Date

91

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education 4 yrs. high school Special Education Typing; 2 yrs.
business administration desirable

Kind of Work Knowledge

Instructs Others	<u>X</u>	Close Cooperation	<u>X</u>
High Intelligence	<u>X</u>	Close Concentration	<u>X</u>
Logical Reasoning	<u> </u>	Facility in	<u> </u>
Emotional Stability	<u>X</u>	Verbal Expression	<u>X</u>

SKILL

Kind or Type

Supervises office personnel; hires personnel

Time for Inexperienced Worker to Learn Job 1 yr.
To Adapt to Our Methods 3 mo Desirable Prior Experience
Leadership Judgment X
Initiative X Independent
Creative Effort Decisions X

PHYSICAL REQUIREMENTS

Nature of Physical Effort

Clerical

Very Active Work	<u> </u>	Great Strength	<u> </u>
Walking	<u>15 %</u>	Much Fatigue	<u> </u>
Standing	<u>10 %</u>	Repetitive	<u> </u>
Sitting	<u>75 %</u>	Varied	<u>X</u>
Other, Specify	<u> </u>	Intermittent	<u> </u>
Age Limits <u>25</u> to <u>50</u>		Minimum Weight	<u> </u>

RESPONSIBILITY

Kind of Equipment, Tools or Materials

Typewriter

For Supervision Given Much For Supervision Received Little

For Contacts with:

Employees	<u>X</u>	Vendors	<u>X</u>
Officers of Co.	<u>X</u>	Public	<u> </u>
Customers	<u> </u>	Records	<u> </u>

Other Responsibilities:

Office supplies; limited decisions affecting costs.

WORKING CONDITIONS

Place	<u>Inside</u>	Noise	<u>X</u>
Type	<u>Supervises</u>	Congestion	<u> </u>
Illumination	<u>Good</u>	Surroundings	<u>Good</u>
Travel, Specify	<u> </u>	Hazards, Specify	<u> </u>

JOB SPECIFICATION

Job-E

Job Title **Engineering Draftman**

Date

92

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education

Special Education

4 years of high school and 2 years of trade school.

Kind of Work Knowledge

General knowledge of drafting and drafting procedures. Knowledge of shop terminology for drawings. Ability to determine proper scales to use in drawings.

Instructs Others

Close Cooperation

X

High Intelligence

X

Close Concentration

X

Logical Reasoning

Facility in

Emotional Stability

Verbal Expression

SKILL

Kind or Type **Making accurate and easily understood drawings corresponding to given specifications. Elementary knowledge of photography.**

Time for Inexperienced Worker to Learn Job

6 months

To Adapt to Our Methods

lmo.

Desirable Prior

Experience **Drafting**

Leadership

Judgment

X

Initiative

X

Independent

Creative Effort

Decisions

PHYSICAL REQUIREMENTS

Nature of Physical Effort

Clerical

Very Active Work

5

Great Strength

Walking

5

Much Fatigue

Standing

90

Repetitive

Sitting

Varied

X

Other, Specify

Intermittent

Age Limits **20** to **40**

Minimum Weight

RESPONSIBILITY

Kind of Equipment, Tools or Materials

Drawing instruments, photographic equipment

For Supervision Given **None**

For Supervision Received **Little**

For Contacts with:

Employees

X

Vendors

Officers of Co.

Public

Customers

Records

Other Responsibilities:

Drawing organization charts, some photography; orders blue prints, maintains files records of drawings.

WORKING CONDITIONS

Place

Inside

Noise

X

Type

Clerical

Congestion

Illumination

Good

Surroundings

Poor

Travel, Specify

Hazards, Specify

JOB SPECIFICATION

Job F

Job Title Receptionist & Telephone Opr. Date 93

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education 4 yrs. high school Special Education

Kind of Work Knowledge

Knowledge of operation of switchboard

Knowledge of company audits and products.

Instructs Others	_____	Close Cooperation	<u>X</u>
High Intelligence	_____	Close Concentration	_____
Logical Reasoning	_____	Facility in	_____
Emotional Stability	<u>X</u>	Verbal Expression	<u>X</u>

SKILL

Kind or Type

Typing speed at least 50 wpm., Handles people in person and over the phone to create a favorable impression.

Time for Inexperienced Worker to Learn Job 3 mos.

To Adapt to Our Methods 1mo. Desirable Prior Experience Telephone Opr.

Leadership	_____	Judgment	_____
Initiative	_____	Independent	_____
Creative Effort	_____	Decisions	_____

PHYSICAL REQUIREMENTS

Nature of Physical Effort Oral; Semi-clerical

Very Active Work	_____	Great Strength	_____
Walking	<u>10</u> %	Much Fatigue	_____
Standing	<u>10</u> %	Repetitive	_____
Sitting	<u>80</u> %	Varied	_____
Other, Specify	_____ %	Intermittent	_____
Age Limits <u>20</u> to <u>45</u>		Minimum Weight	_____

RESPONSIBILITY

Kind of Equipment, Tools or Materials

Telephone, switchboard, typewriter and teletype machine.

For Supervision Given None For Supervision Received Little

For Contacts with:

Employees	<u>X</u>	Vendors	<u>X</u>
Officers of Co.	<u>X</u>	Public	<u>X</u>
Customers	<u>X</u>	Records	_____

Other Responsibilities:

None

WORKING CONDITIONS

Place	<u>Inside</u>	Noise	<u>X</u>
Type	<u>Clerical</u>	Congestion	_____
Illumination	<u>Good</u>	Surroundings	<u>Good</u>
Travel, Specify	_____	Hazards, Specify	<u>Finger injuries.</u>

JOB SPECIFICATION

Job-G
Job Title Senior Clerk--Acct. Dept. Date 94
(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education 4 years high school Special Education Typing and accounting

Kind of Work Knowledge Good english and grammer.
Knowledge of machine

Instructs Others	_____	Close Cooperation	_____
High Intelligence	_____	Close Concentration	_____
Logical Reasoning	_____	Facility in	_____
Emotional Stability	_____	Verbal Expression	_____

SKILL

Kind or Type Takes dictation and transcribes. Posts to ledgers, writes collection form letters.

Time for Inexperienced Worker to Learn Job 6 months
To Adapt to Our Methods lmo Desirable Prior Experience _____
Leadership X Judgment _____
Initiative _____ Independent _____
Creative Effort _____ Decisions _____

PHYSICAL REQUIREMENTS

Nature of Physical Effort Clerical

Very Active Work	_____	Great Strength	_____
Walking	<u>1</u> %	Much Fatigue	_____
Standing	<u>0</u> %	Repetitive	_____
Sitting	<u>99</u> %	Varied	_____
Other, Specify	_____ %	Intermittent	_____
Age Limits <u>20</u> to <u>50</u>		Minimum Weight	_____

RESPONSIBILITY

Kind of Equipment, Tools or Materials
Typewriter, adding machine

For Supervision Given None For Supervision Received Much

For Contacts with:

Employees	<u>X</u>	Vendors	_____
Officers of Co.	_____	Public	_____
Customers	_____	Records	_____

Other Responsibilities:

Correspondence and machine sales records.

WORKING CONDITIONS

Place	<u>Inside</u>	Noise	<u>X</u>
Type	<u>Clerical</u>	Congestion	_____
Illumination	<u>Good</u>	Surroundings	<u>Pleasant</u>
Travel, Specify	_____	Hazards, Specify	_____

JOB SPECIFICATION

Job H

Job Title Senior Cost Clerk--Engineer Dep'te

95

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education 4 years high school Special Education 1 year accounting

Kind of Work Knowledge

General knowledge of accounting procedures. Knowledge of ledgers, accounts and other accounting procedures.

Instructs Others	_____	Close Cooperation	<u>X</u>
High Intelligence	_____	Close Concentration	<u>X</u>
Logical Reasoning	_____	Facility in	_____
Emotional Stability	_____	Verbal Expression	_____

SKILL

Kind or Type Initiates production orders. Maintains records of material and labor costs. Maintains kardex stock record of manufactures parts.

Time for Inexperienced Worker to Learn Job 1 year
To Adapt to Our Methods 6 mo Desirable Prior Experience accounting.
Leadership _____ Judgment X
Initiative X Independent _____
Creative Effort _____ Decisions _____

PHYSICAL REQUIREMENTS

Nature of Physical Effort Clerical

Very Active Work	_____	Great Strength	_____
Walking	<u>1</u> %	Much Fatigue	_____
Standing	_____ %	Repetitive	_____
Sitting	<u>99</u> %	Varied	_____
Other, Specify	_____ %	Intermittent	_____
Age Limits _____ to _____		Minimum Weight	_____

RESPONSIBILITY

Kind of Equipment, Tools or Materials
Kardex stock records and accounting ledgers.

For Supervision Given None For Supervision Received Little

For Contacts with:

Employees	<u>X</u>	Vendors	_____
Officers of Co.	_____	Public	_____
Customers	_____	Records	_____

Other Responsibilities:

Makes out cost reports. Helps devise and install cost system; records of material and labor costs.

WORKING CONDITIONS

Place	<u>Inside</u>	Noise	<u>X</u>
Type	<u>Clerical</u>	Congestion	_____
Illumination	<u>Good</u>	Surroundings	<u>Poor</u>
Travel, Specify	_____	Hazards, Specify	_____

JOB SPECIFICATION

96

Job-I

Job Title Bookkeeper

Date _____

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTSEducation 4 years high school Special Education 1 year accountingKind of Work Knowledge
Detailed knowledge of accounting

Instructs Others	_____	Close Cooperation	_____
High Intelligence	_____	Close Concentration	_____
Logical Reasoning	_____	Facility in	_____
Emotional Stability	_____	Verbal Expression	_____

SKILLKind or Type Determination of proper entries in accounting records, accurate posting of entries, accurate compilation of statements and reports.Time for Inexperienced Worker to Learn Job 3 years
To Adapt to Our Methods 3mo Desirable Prior Experience Bookkeeper

Leadership	_____	Judgment	_____
Initiative	_____	Independent	_____
Creative Effort	_____	Decisions	_____

PHYSICAL REQUIREMENTSNature of Physical Effort Clerical

Very Active Work	_____	Great Strength	_____
Walking	_____ %	Much Fatigue	_____
Standing	<u>5</u> %	Repetitive	_____
Sitting	<u>95</u> %	Varied	_____
Other, Specify	_____ %	Intermittent	_____
Age Limits <u>25</u> to <u>--</u>		Minimum Weight	_____

RESPONSIBILITYKind of Equipment, Tools or Materials
Adding machine

For Supervision Given _____ For Supervision Received _____

For Contacts with:

Employees	<u>X</u>	Vendors	_____
Officers of Co.	_____	Public	_____
Customers	_____	Records	_____

Other Responsibilities:

Compiling profit and loss statements. Keeps journal and other financial records.WORKING CONDITIONS

Place	<u>Inside</u>	Noise	<u>X</u>
Type	<u>Clerical</u>	Congestion	_____
Illumination	<u>Good</u>	Surroundings	<u>Poor</u>
Travel, Specify	_____	Hazards, Specify	_____

JOB SPECIFICATION

97

Job J
Job Title Accounting Clerk Date _____
(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education 4 years high school Special Education _____ Typing and Bookkeeping _____
Kind of Work Knowledge _____

Instructs Others _____ Close Cooperation _____
High Intelligence _____ Close Concentration _____
Logical Reasoning _____ Facility in _____
Emotional Stability _____ Verbal Expression _____

SKILL

Kind or Type Accurately posting accounts. Accuracy and speed in checking invoices and writing checks.

Time for Inexperienced Worker to Learn Job 1 year.
To Adapt to Our Methods 3mo. Desirable Prior Experience Accounts
Leadership _____ Judgment _____
Initiative _____ Independent _____
Creative Effort _____ Decisions _____

PHYSICAL REQUIREMENTS

Nature of Physical Effort Clerical
Very Active Work _____ Great Strength _____
Walking _____ % Much Fatigue _____
Standing _____ % Repetitive _____
Sitting 100 % Varied _____
Other, Specify _____ % Intermittent _____
Age Limits 20 to 35 Minimum Weight _____

RESPONSIBILITY

Kind of Equipment, Tools or Materials
Adding Machine and Typewriter
For Supervision Given None For Supervision Received Much
For Contacts with:
Employees X Vendors _____
Officers of Co. _____ Public _____
Customers _____ Records _____
Other Responsibilities: _____

WORKING CONDITIONS

Place Inside Noise X
Type Clerical Congestion _____
Illumination Good Surroundings Good
Travel, Specify _____ Hazards, Specify _____

JOB SPECIFICATION

98

Job-K

Job Title Mail & File Clerk

Date _____

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education

4 years of high school

Special Education _____

Kind of Work Knowledge

General knowledge of filing, mimeograph and ditto machine.

Knowledge of addressograph equipment, teletype and switch board.

Instructs Others _____

Close Cooperation _____

High Intelligence _____

Close Concentration _____

Logical Reasoning _____

Facility in _____

Emotional Stability _____

Verbal Expression _____

SKILL

Kind or Type **Operates teletype and switch board, addressograph.**

Operating mimeograph and ditto machine. Weighs letters and packages, places proper postage. Collects and delivers mail.

Time for Inexperienced Worker to Learn Job **3 months**

To Adapt to Our Methods **3mo.** Desirable Prior Experience **File and Mail**

Leadership _____

Judgment _____

Initiative _____

Independent _____

Creative Effort _____

Decisions _____

PHYSICAL REQUIREMENTS

Nature of Physical Effort

Clerical

Very Active Work _____

Great Strength _____

Walking _____

30 %

Much Fatigue _____

Standing _____

35 %

Repetitive _____

Sitting _____

35 %

Varied _____

Other, Specify _____

%

Intermittent _____

Age Limits **16** to **40**

40

Minimum Weight _____

RESPONSIBILITY

Kind of Equipment, Tools or Materials

For Supervision Given **None**

For Supervision Received **Much**

For Contacts with:

Employees _____

X

Vendors _____

Officers of Co. _____

Public _____

Customers _____

Records **X**

Other Responsibilities:

Correspondence records

WORKING CONDITIONS

Place

Inside

Noise

X

Type

Clerical

Congestion

Illumination

Good

Surroundings

Good

Travel, Specify _____

Hazards, Specify _____

X

JOB SPECIFICATION

Job-L

Job Title Transcribing Mach. Operator Date 99

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education 4 years highschool Special Education Typing

Kind of Work Knowledge
General Knowledge of Sales Procedure. Detailed knowledge of spelling and english grammer.

Instructs Others	_____	Close Cooperation	_____
High Intelligence	_____	Close Concentration	_____
Logical Reasoning	_____	Facility in	_____
Emotional Stability	_____	Verbal Expression	_____

SKILL

Kind or Type
Typing speed of 60 words per minute. Neatness in typing and arrangement of letters. Transcribes dictated material.

Time for Inexperienced Worker to Learn Job 6 months.
To Adapt to Our Methods 1 mo Desirable Prior Experience Typist
Leadership _____ Judgment _____
Initiative _____ Independent _____
Creative Effort _____ Decisions _____

PHYSICAL REQUIREMENTS

Nature of Physical Effort Clerical

Very Active Work	_____	Great Strength	_____
Walking	<u>5</u> %	Much Fatigue	_____
Standing	_____ %	Repetitive	<u>X</u>
Sitting	<u>95</u> %	Varied	_____
Other, Specify	_____ %	Intermittent	_____
Age Limits <u>20</u> to <u>40</u>		Minimum Weight	_____

RESPONSIBILITY

Kind of Equipment, Tools or Materials
Transcribing machine, typewriter and stationery forms.

For Supervision Given None For Supervision Received Much
For Contacts with:
Employees X Vendors _____
Officers of Co. _____ Public _____
Customers _____ Records _____
Other Responsibilities:

WORKING CONDITIONS

Place	<u>Inside</u>	Noise	<u>X</u>
Type	<u>Clerical</u>	Congestion	_____
Illumination	<u>Good</u>	Surroundings	<u>Pleasant</u>
Travel, Specify	_____	Hazards, Specify	<u>Finger injuries.</u>

JOB SPECIFICATION

Job-M
Job Title Stenographer--Typist Date _____ 100
(Use (X) to indicate, (XX) to stress)
MENTAL REQUIREMENTS

Education 4 years high school Special Education Stenographer

Kind of Work Knowledge

Knowledge of shorthand, transcribing machine and typewriter.
Good grammar.

Instructs Others _____	Close Cooperation _____
High Intelligence _____	Close Concentration _____
Logical Reasoning _____	Facility in _____
Emotional Stability _____	Verbal Expression _____

SKILL

Kind or Type Transcribes shorthand and dictaphone records,
using typewriter.

Time for Inexperienced Worker to Learn Job 6 months
To Adapt to Our Methods 1 mo Desirable Prior Experience Secretarial
Leadership _____ Judgment _____
Initiative _____ Independent _____
Creative Effort _____ Decisions _____

PHYSICAL REQUIREMENTS

Nature of Physical Effort

Very Active Work _____	Great Strength _____
Walking _____ %	Much Fatigue _____
Standing _____ %	Repetitive _____
Sitting <u>90</u> %	Varied _____
Other, Specify _____ %	Intermittent _____
Age Limits _____ to _____	Minimum Weight _____

RESPONSIBILITY

Kind of Equipment, Tools or Materials

Dictaphone, adding machine, transcribing machine and typewriter.

For Supervision Given None For Supervision Received Much

For Contacts with:

Employees _____ X _____	Vendors _____
Officers of Co. _____	Public _____
Customers _____	Records _____
Other Responsibilities:	

Keeps correspondence records

WORKING CONDITIONS

Place _____	<u>Inside</u>	Noise _____	<u>X</u>
Type _____	<u>Clerical</u>	Congestion _____	
Illumination _____	<u>Good</u>	Surroundings _____	<u>Good</u>
Travel, Specify _____		Hazards, Specify <u>Finger injuries</u>	

JOB SPECIFICATION

Job-N

Job Title General Office Clerk Date 101

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education 4 years high schoolSpecial Education Typing

Kind of Work Knowledge

General knowledge of typing. Knowledge of dictaphone, mimeographing and ditto machine.

Instructs Others	_____	Close Cooperation	_____
High Intelligence	_____	Close Concentration	_____
Logical Reasoning	_____	Facility in	_____
Emotional Stability	_____	Verbal Expression	_____

SKILL

Kind or Type

Transcribes letters, operates typewriter, at fifty words per minute, mimeographing, ditto, switchboard and dictaphone.

Time for Inexperienced Worker to Learn Job None

To Adapt to Our Methodsmo.Desirable Prior Experience_____

Leadership _____ Judgment _____

Initiative _____ Independent _____

Creative Effort_____ Decisions _____

PHYSICAL REQUIREMENTS

Nature of Physical Effort

Very Active Work	_____	Great Strength	_____
Walking	10 %	Much Fatigue	_____
Standing	50 %	Repetitive	X
Sitting	40 %	Varied	_____
Other,Specify	_____ %	Intermittent	_____
Age Limits_____ to _____		Minimum Weight	_____

RESPONSIBILITY

Kind of Equipment, Tools or Materials

Typewriter, mimeograph, ditto, switchboard and dictaphone.

For Supervision Given NoneFor Supervision Received Much

For Contacts with:

Employees X Vendors _____

Officers of Co. _____ Public _____

Customers _____ Records _____

Other Responsibilities:

WORKING CONDITIONS

Place	Inside	Noise	X
Type	Clerical	Congestion	_____
Illumination	Good	Surroundings	Good
Travel, Specify	_____	Hazards, Specify	Finger injuries

JOB SPECIFICATION

Job-O

Job Title Secretary-Engineering Dept. Date _____

(Use (X) to indicate, (XX) to stress)

102

MENTAL REQUIREMENTS

Education 4 years of high school Special Education stenographer course

Kind of Work Knowledge

General knowledge of dictation, shorthand, mineographing, and dictaphone. Use good grammer.

Instructs Others	_____	Close Cooperation	_____
High Intelligence	_____	Close Concentration	_____
Logical Reasoning	_____	Facility in	_____
Emotional Stability	_____	Verbal Expression	_____

SKILL

Kind or Type Operates mineograph machine, dictaphone. Takes dictation by shorthand and transcribes same.

Time for Inexperienced Worker to Learn Job 6 mos.

To Adapt to Our Methods 2mo Desirable Prior Experience Secretarial

Leadership	_____	Judgment	_____
Initiative	_____	Independent	_____
Creative Effort	_____	Decisions	_____

PHYSICAL REQUIREMENTS

Nature of Physical Effort Clerical

Very Active Work	_____	Great Strength	_____
Walking	<u>25</u> %	Much Fatigue	_____
Standing	<u>25</u> %	Repetitive	<u>X</u>
Sitting	<u>50</u> %	Varied	_____
Other, Specify	_____ %	Intermittent	_____
Age Limits _____ to _____		Minimum Weight	_____

RESPONSIBILITY

Kind of Equipment, Tools or Materials Stencils, mineograph machine and dictaphone.

For Supervision Given None For Supervision Received Much

For Contacts with:

Employees	<u>X</u>	Vendors	<u>X</u>
Officers of Co.	<u>X</u>	Public	_____
Customers	<u>X-</u>	Records	<u>X</u>

Other Responsibilities:

Correspondence records.

WORKING CONDITIONS

Place	<u>Inside</u>	Noise	<u>X</u>
Type	<u>Clerical</u>	Congestion	_____
Illumination	<u>Good</u>	Surroundings	<u>Poor</u>
Travel, Specify	_____	Hazards, Specify	<u>Slight</u>

JOB SPECIFICATION

103

Job-P

Job Title Secretary-Production Dept. Date _____
(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education 4 yrs, high school Special Education Typing and stenography

Kind of Work Knowledge

General knowledge of company and products.

Detailed knowledge of english, shorthand, typing and dictation.

Instructs Others	_____	Close Cooperation	_____
High Intelligence	_____	Close Concentration	_____
Logical Reasoning	_____	Facility in	_____
Emotional Stability	_____	Verbal Expression	_____

SKILL

Kind or Type Takes dictation and transcribes.

Efficient use of typewriter, at least 60wpm. Writes shipping letters, keeps some personal records .

Time for Inexperienced Worker to Learn Job 6 mos .

To Adapt to Our Methods no Desirable Prior Experience Stenographer

Leadership	_____	Judgment	_____
Initiative	_____	Independent	_____
Creative Effort	_____	Decisions	_____

PHYSICAL REQUIREMENTS

Nature of Physical Effort Clerical

Very Active Work	_____	Great Strength	_____
Walking	<u>25</u> %	Much Fatigue	_____
Standing	<u>25</u> %	Repetitive	<u>x</u>
Sitting	<u>50</u> %	Varied	_____
Other, Specify	_____ %	Intermittent	_____
Age Limits <u>25</u> to <u>35</u>		Minimum Weight	_____

RESPONSIBILITY

Kind of Equipment, Tools or Materials

Typewriter and dictaphone

For Supervision Given None For Supervision Received Much

For Contacts with:

Employees	<u>x</u>	Vendors	<u>x</u>
Officers of Co.	<u>x</u>	Public	_____
Customers	<u>x</u>	Records	<u>x</u>

Other Responsibilities:

Keeps miscellaneous pers onnel records.

WORKING CONDITIONS

Place	<u>Inside</u>	Noise	<u>x</u>
Type	<u>Clerical</u>	Congestion	_____
Illumination	<u>Good</u>	Surroundings	<u>Pleasant</u>
Travel, Specify	_____	Hazards, Specify	<u>Slight</u>

JOB SPECIFICATION

Job-Q

Job Title Receiving Clerk Date _____
(Use (X) to indicate, (XX) to stress)

104

MENTAL REQUIREMENTS

Education 4 years high school Special Education _____

Kind of Work Knowledge
Knowledge of inventory records.

Instructs Others _____	Close Cooperation <u>X</u> _____
High Intelligence _____	Close Concentration _____
Logical Reasoning _____	Facility in _____
Emotional Stability _____	Verbal Expression _____

SKILL

Kind or Type Operates power hack saw, checks delivered goods, delivers orders. Ability to control perpetual inventory. Operates material handling equipment.

Time for Inexperienced Worker to Learn Job 1 year.

To Adapt to Our Methods 6mo Desirable Prior Experience Shipping Clerk

Leadership _____	Judgment _____
Initiative _____	Independent _____
Creative Effort _____	Decisions _____

PHYSICAL REQUIREMENTS

Nature of Physical Effort Manual Labor

Very Active Work <u>X</u> _____	Great Strength <u>X</u> _____
Walking <u>60</u> % _____	Much Fatigue _____
Standing <u>20</u> % _____	Repetitive _____
Sitting <u>20</u> % _____	Varied <u>X</u> _____
Other, Specify _____ % _____	Intermittent _____
Age Limits _____ to _____	Minimum Weight _____

RESPONSIBILITY

Kind of Equipment, Tools or Materials

Power hack saw, material handling equipment, raw materials.

For Supervision Given None For Supervision Received Little

For Contacts with:

Employees <u>X</u> _____	Vendors _____
Officers of Co. _____	Public _____
Customers _____	Records <u>X</u> _____

Other Responsibilities:

Keeps perpetual inventory

WORKING CONDITIONS

Place <u>Inside</u> _____	Noise <u>X</u> _____
Type <u>Semi-clerical</u> _____	Congestion <u>X</u> _____
Illumination <u>Fair</u> _____	Surroundings <u>Fair</u> _____
Travel, Specify _____	Hazards, Specify <u>Heavy machinery</u> _____

JOB SPECIFICATION

Job-R

105

Job Title Vice President--Manufacturing Date

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education 4 years of college Special Education

Kind of Work Knowledge

General knowledge of business management, personnel relations, production procedures. Detailed knowledge of inventory control, traffic management, purchasing routine.

Instructs Others	<u>X</u>	Close Cooperation	<u>X</u>
High Intelligence	<u>X</u>	Close Concentration	<u>X</u>
Logical Reasoning		Facility in	
Emotional Stability	<u>X</u>	Verbal Expression	<u>X</u>

SKILL

Kind or Type Coordinating tangible and intangible phases of production program.

Time for Inexperienced Worker to Learn Job 1 year
 To Adapt to Our Methods 5-7 yrs. 5 yrs. major executive
 Leadership XX Judgment XX
 Initiative XX Independent
 Creative Effort XX Decisions XX

PHYSICAL REQUIREMENTS

Nature of Physical Effort Clerical, Supervisory

Very Active Work		Great Strength	
Walking	<u>%</u>	Much Fatigue	
Standing	<u>%</u>	Repetitive	
Sitting	<u>100</u>	Varied	<u>X</u>
Other, Specify	<u>%</u>	Intermittent	
Age Limits <u>33</u> to <u>50</u>		Minimum Weight	

RESPONSIBILITY

Kind of Equipment, Tools or Materials None

For Supervision Given Much For Supervision Received Little

For Contacts with:

Employees	<u>X</u>	Vendors	<u>X</u>
Officers of Co.	<u>X</u>	Public	<u>X</u>
Customers	<u>X</u>	Records	

Other Responsibilities:

To produce machines in quantity and quality as requested by the sales department.

WORKING CONDITIONS

Place	<u>Inside</u>	Noise	
Type	<u>Executive</u>	Congestion	
Illumination	<u>Good</u>	Surroundings	<u>Good</u>
Travel, Specify	<u>Limited</u>	Hazards, Specify	

JOB SPECIFICATION

Job-S

106

Job Title Industrial Engineer

Date _____

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education

Degree in I. E.

Special Education _____

Kind of Work Knowledge _____

Thorough knowledge of all phases of Industrial Engineering.

Instructs Others _____

X

Close Cooperation _____

High Intelligence _____

Close Concentration _____

Logical Reasoning _____

Facility in _____

Emotional Stability _____

X

Verbal Expression _____

X

SKILL

Kind or Type Must have considerable planning ability to co-ordinate and efficiently supervise drafting, planning, methods, parts and costs departments.

Time for Inexperienced Worker to Learn Job 1 year

To Adapt to Our Methods 5 yrs

Desirable Prior _____

Experience _____

Supervisory

Leadership _____

XX

Judgment _____

XX

I.E. Work

Initiative _____

XX

Independent _____

Creative Effort _____

Decisions _____

XX

PHYSICAL REQUIREMENTS

Nature of Physical Effort _____

Clerical and supervisory

Very Active Work _____

X

Great Strength _____

Walking _____

5

Much Fatigue _____

Standing _____

10

Repetitive _____

Sitting _____

85

Varied _____

X

Other, Specify _____

%

Intermittent _____

Age Limits _____ to _____

Minimum Weight _____

RESPONSIBILITY

Kind of Equipment, Tools or Materials Responsible for efficient operations of drafting, planning, methods, parts and costs departments

For Supervision Given Much

For Supervision Received Little

For Contacts with:

Employees _____

Vendors _____

X

Officers of Co. _____

X

Public _____

Customers _____

X

Records _____

Other Responsibilities:

Supervises job evaluation program. Miscellaneous staff assignments; patent matters; plans and supervises construction of new alterations of building.

WORKING CONDITIONS

Place _____

Inside

Noise _____

Type _____

Supervisory

Congestion _____

Illumination _____

Good

Surroundings _____

Good

Travel, Specify _____

Hazards, Specify _____

JOB SPECIFICATION

Job-T

107

Job Title Assistant to Vice-Pres. of Sales

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education 4 years of college Special Education

Kind of Work Knowledge

General knowledge of company's sales policies and products.

Instructs Others	<u>X</u>	Close Cooperation	<u>X</u>
High Intelligence	<u> </u>	Close Concentration	<u>X</u>
Logical Reasoning	<u> </u>	Facility in	<u> </u>
Emotional Stability	<u> </u>	Verbal Expression	<u>X</u>

SKILL

Kind or Type Writing letters, handling people.

Time for Inexperienced Worker to Learn Job	<u>1 year</u>		
To Adapt to Our Methods	<u>3 mo</u>	Desirable Prior Experience	<u>General</u>
Leadership	<u>X</u>	Judgment	<u>X</u> Business
Initiative	<u>X</u>	Independent	<u> </u>
Creative Effort	<u> </u>	Decisions	<u>X</u>

PHYSICAL REQUIREMENTS

Nature of Physical Effort Clerical and supervisory

Very Active Work	<u> </u>	Great Strength	<u> </u>
Walking	<u>20 %</u>	Much Fatigue	<u> </u>
Standing	<u>15 %</u>	Repetitive	<u> </u>
Sitting	<u>65 %</u>	Varied	<u>X</u>
Other, Specify	<u> </u>	Intermittent	<u> </u>
Age Limits <u> </u> to <u> </u>		Minimum Weight	<u> </u>

RESPONSIBILITY

Kind of Equipment, Tools or Materials Dictaphone

For Supervision Given Much For Supervision Received Little

For Contacts with:

Employees	<u>X</u>	Vendors	<u> </u>
Officers of Co.	<u> </u>	Public	<u> </u>
Customers	<u>X</u>	Records	<u> </u>

Other Responsibilities:

Process machine orders, satisfying customers on service request, selling machines and correspondence.

WORKING CONDITIONS

Place	<u>Inside</u>	Noise	<u>X</u>
Type	<u>Supervises</u>	Congestion	<u> </u>
Illumination	<u>Good</u>	Surroundings	<u>Good</u>
Travel, Specify	<u>Some</u>	Hazards, Specify	<u> </u>

JOB SPECIFICATION

Job-U

Job Title Advertising Manager

Date

106

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education

Special Education

Equivalent of 4 years of college.

Kind of Work Knowledge

General knowledge of advertising, salesmanship, mechanics and wood working. Detailed knowledge of advertising.

Instructs Others	<u>X</u>	Close Cooperation	<u>X</u>
High Intelligence	<u>X</u>	Close Concentration	<u>X</u>
Logical Reasoning		Facility in	
Emotional Stability	<u>X</u>	Verbal Expression	

SKILL

Kind or Type Supervising advertising copy and layout works.
Creating successful advertising ideas.

Time for Inexperienced Worker to Learn Job	<u>3 yrs.</u>
To Adapt to Our Methods	<u>1 yr.</u>
Leadership	
Initiative	<u>X</u>
Creative Effort	<u>X</u>
Desirable Prior Experience	<u>Advertising</u>
Judgment	
Independent	
Decisions	<u>X</u>

PHYSICAL REQUIREMENTS

Nature of Physical Effort Clerical

Very Active Work	<u>15</u>	%	Great Strength	
Walking	<u>15</u>	%	Much Fatigue	
Standing	<u>70</u>	%	Repetitive	
Sitting		%	Varied	<u>X</u>
Other, Specify		%	Intermittent	
Age Limits		to	Minimum Weight	

RESPONSIBILITY

Kind of Equipment, Tools or Materials

Typewriter, drawing equipment.

For Supervision Given None For Supervision Received Little
For Contacts with:

Employees		Vendors	<u>X</u>
Officers of Co.		Public	
Customers	<u>X</u>	Records	
Other Responsibilities:			

Responsible for successful advertising program and sale of Auto-Nailers.

WORKING CONDITIONS

Place	<u>Inside</u>	Noise	<u>X</u>
Type	<u>Clerical</u>	Congestion	
Illumination	<u>Good</u>	Surroundings	<u>Pleasant</u>
Travel, Specify	<u>Limited</u>	Hazards, Specify	

JOB SPECIFICATION

Job-V

Job Title Secretary & Treasurer

Date _____

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

109

Education

4 years of college

Special Education

Accounting

Kind of Work Knowledge

Detailed knowledge of financial operations, accounting system.

General knowledge of economics, company's products and policies.

Instructs Others

X

Close Cooperation

X

High Intelligence

X

Close Concentration

X

Logical Reasoning

Facility in

Emotional Stability

X

Verbal Expression

SKILL

Kind or Type Making some decisions on policies and procedures coordinating activity under direction.

Time for Inexperienced Worker to Learn Job 2 years

To Adapt to Our Methods 1yr Desirable Prior Experience Treasurer or

Leadership

Judgment

Accountant

Initiative

X

Independent

Creative Effort

Decisions

PHYSICAL REQUIREMENTS

Nature of Physical Effort

Clerical

Very Active Work

Great Strength

Walking

15

%

Much Fatigue

Standing

10

%

Repetitive

Sitting

75

%

Varied

X

Other, Specify

Intermittent

Age Limits 30 to --

Minimum Weight

RESPONSIBILITY

Kind of Equipment, Tools or Materials

Adding machine

For Supervision Given Much For Supervision Received Little

For Contacts with:

Employees

X

Vendors

X

Officers of Co.

X

Public

Customers

X

Records

Other Responsibilities:

Financial Records

WORKING CONDITIONS

Place

Inside

Noise

X

Type

Clerical

Congestion

Illumination

Good

Surroundings

Pleasant

Travel, Specify

Hazards, Specify

Job-W

JOB SPECIFICATIONJob Title Export Manager

Date _____

(Use (X) to indicate, (XX) to stress)

110

MENTAL REQUIREMENTS

Education

Special Education

4 years high school and 2 years business school

Kind of Work Knowledge

Knowledge of company's products and operation. General knowledge of english and foreign languages. Detailed knowledge of export procedures.

Instructs Others

X

Close Cooperation

X

High Intelligence

Close Concentration

X

Logical Reasoning

Facility in

Emotional Stability

Verbal Expression

XSKILL

Kind or Type Composing and dictating sales letters to foreign agents. Handling orders and invoicing routine.

Time for Inexperienced Worker to Learn Job 1 yearTo Adapt to Our Methods 3mo-1 year Prior Experience Export work

Leadership

X

Judgment

Initiative

Independent

Creative Effort

Decisions

PHYSICAL REQUIREMENTSNature of Physical Effort Clerical, supervisory

Very Active Work

Great Strength

Walking

10%

Much Fatigue

Standing

15%

Repetitive

Sitting

75%

Varied

X

Other, Specify

Intermittent

Age Limits 25 to

Minimum Weight

RESPONSIBILITY

Kind of Equipment, Tools or Materials

Typewriter, DictaphoneFor Supervision Given MuchFor Supervision Received Much

For Contacts with:

Employees

Vendors

Officers of Co.

X

Public

X

Customers

Records

Other Responsibilities:

Contacts foreign agents, banks, railroads, and government agencies.WORKING CONDITIONS

Place

Inside

Noise

X

Type

Sales & Supervision

Congestion

Illumination

Good

Surroundings

Good

Travel, Specify

Hazards, Specify

JOB SPECIFICATION

111

Job-X

Job Title Comptroller

Date _____

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education

Special Education

Kind of Work Knowledge 4 years of high school and 2 years of business school.

Instructs Others	<u>X</u>	Close Cooperation	<u>X</u>
High Intelligence	<u>X</u>	Close Concentration	<u>X</u>
Logical Reasoning	_____	Facility in	_____
Emotional Stability	<u>X</u>	Verbal Expression	_____

SKILL

Kind or Type Supervising employees doing accounting. Devises accounting procedures and systems.

Time for Inexperienced Worker to Learn Job 2 years.
To Adapt to Our Methods 3mo. Desirable Prior Experience _____
Leadership X Judgment _____
Initiative X Independent _____
Creative Effort _____ Decisions _____

PHYSICAL REQUIREMENTS

Nature of Physical Effort Clerical, Supervisory

Very Active Work	_____	Great Strength	_____
Walking	<u>10</u> %	Much Fatigue	_____
Standing	<u>10</u> %	Repetitive	_____
Sitting	<u>80</u> %	Varied	<u>X</u>
Other, Specify	_____ %	Intermittent	_____
Age Limits _____ to _____		Minimum Weight	_____

RESPONSIBILITY

Kind of Equipment, Tools or Materials

Calculator, adding machine.

For Supervision Given Much For Supervision Received Little

For Contacts with:

Employees	<u>X</u>	Vendors	_____
Officers of Co.	<u>X</u>	Public	_____
Customers	_____	Records	_____

Other Responsibilities:

Auditing all company accounts to insure correction and accuracy.

WORKING CONDITIONS

Place	<u>Inside</u>	Noise	<u>X</u>
Type	<u>Supervisory</u>	Congestion	_____
Illumination	<u>Good</u>	Surroundings	<u>Pleasant</u>
Travel, Specify	_____	Hazards, Specify	_____

JOB SPECIFICATION

112

Job-Y

Job Title Purchasing Agent

Date _____

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education 4 years highschool and two years business school Special Education _____

Kind of Work Knowledge _____

Knowledge of sources of supply for various materials

Instructs Others _____	Close Cooperation <u>X</u>
High Intelligence _____	Close Concentration <u>X</u>
Logical Reasoning _____	Facility in _____
Emotional Stability <u>X</u>	Verbal Expression _____

SKILL

Kind or Type Finding new sources of supply advantageous to the company.

Time for Inexperienced Worker to Learn Job 1 year
 To Adapt to Our Methods 1 mo. Desirable Prior Experience Purchasing
 Leadership _____ Judgment _____
 Initiative _____ Independent _____
 Creative Effort _____ Decisions _____

PHYSICAL REQUIREMENTS

Nature of Physical Effort	<u>Clerical</u>
Very Active Work <u>15</u> %	Great Strength _____
Walking <u>15</u> %	Much Fatigue _____
Standing <u>15</u> %	Repetitive _____
Sitting <u>70</u> %	Varied <u>X</u>
Other, Specify _____ %	Intermittent _____
Age Limits <u>25</u> to <u>60</u>	Minimum Weight _____

RESPONSIBILITY

Kind of Equipment, Tools or Materials

Dictaphone, supplier's catalogues.

For Supervision Given None For Supervision Received Little

For Contacts with:

Employees _____	Vendors <u>X</u>
Officers of Co. _____	Public _____
Customers _____	Records _____

Other Responsibilities:

Access to confidential information; responsible for getting material delivered on time.

WORKING CONDITIONS

Place <u>Inside</u>	Noise _____
Type <u>Clerical</u>	Congestion _____
Illumination <u>Good</u>	Surroundings <u>Good</u>
Travel, Specify _____	Hazards, Specify _____

JOB SPECIFICATION

Job-Z

Job Title General Factory Superintendent Date 113

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education 4 years of high school Special Education 10 years shop training.
Kind of Work Knowledge
Fundamental knowledge of shop procedures and shop supervision.

Instructs Others	<u>X</u>	Close Cooperation	<u> </u>
High Intelligence	<u>X</u>	Close Concentration	<u> </u>
Logical Reasoning	<u> </u>	Facility in	<u> </u>
Emotional Stability	<u> </u>	Verbal Expression	<u> </u>

SKILL

Kind or Type Ability to coordinate and supervise various departments and maintain production at required level.

Time for Inexperienced Worker to Learn Job 10 years
To Adapt to Our Methods 2 yrs Desirable Prior Experience Shop supervision
Leadership X Judgment X
Initiative X Independent
Creative Effort Decisions X

PHYSICAL REQUIREMENTS

Nature of Physical Effort Clerical, Supervisory

Very Active Work	<u> </u>	Great Strength	<u> </u>
Walking	<u>20 %</u>	Much Fatigue	<u> </u>
Standing	<u>20 %</u>	Repetitive	<u> </u>
Sitting	<u>60 %</u>	Varied	<u>X</u>
Other, Specify	<u> </u>	Intermittent	<u> </u>
Age Limits <u>30</u> to <u>45</u>		Minimum Weight	<u> </u>

RESPONSIBILITY

Kind of Equipment, Tools or Materials
Entire machine shop.

For Supervision Given Much For Supervision Received Little
For Contacts with:
Employees X Vendors X
Officers of Co. X Public
Customers Records
Other Responsibilities:

WORKING CONDITIONS

Place	<u>Inside</u>	Noise	<u>X</u>
Type	<u>Supervisory</u>	Congestion	<u> </u>
Illumination	<u>Good</u>	Surroundings	<u>Good</u>
Travel, Specify	<u> </u>	Hazards, Specify	<u> </u>

Job-IA

JOB SPECIFICATION

114

Job Title Assistant Treasurer Date _____
 (Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education 4 years high school and 2 years of business school Special Education _____

Kind of Work Knowledge

General knowledge of accounting. Detailed knowledge of credits and collections.

Instructs Others	<u>X</u>	Close Cooperation	<u>X</u>
High Intelligence	<u>X</u>	Close Concentration	<u>X</u>
Logical Reasoning	_____	Facility in	_____
Emotional Stability	<u>X</u>	Verbal Expression	_____

SKILL

Kind or Type Supervise and record keeping functions. Handling collection of delinquent accounts. Handling TRN contracts.

Time for Inexperienced Worker to Learn Job 1 year
 To Adapt to Our Methods 3mo. Desirable Prior Experience Accounting work
 Leadership _____ Judgment _____
 Initiative _____ Independent _____
 Creative Effort _____ Decisions _____

PHYSICAL REQUIREMENTS

Nature of Physical Effort Clerical, Supervisory

Very Active Work	_____	Great Strength	_____
Walking	<u>10-</u> %	Much Fatigue	_____
Standing	<u>80-</u> %	Repetitive	_____
Sitting	<u>10-</u> %	Varied	<u>X</u>
Other, Specify _____	%	Intermittent	_____
Age Limits <u>21</u> to <u>55</u>		Minimum Weight	_____

RESPONSIBILITY

Kind of Equipment, Tools or Materials

Typewriter and adding machine.

For Supervision Given None For Supervision Received Little
 For Contacts with:

Employees	_____	Vendors	_____
Officers of Co.	<u>X</u>	Public	_____
Customers	_____	Records	_____

Other Responsibilities:

Contacts with banks. Keeping accurate records of machines sold, accounts received, and collections of machinery accounts.

WORKING CONDITIONS

Place	<u>Inside</u>	Noise	<u>X</u>
Type	<u>Supervise</u>	Congestion	_____
Illumination	<u>Good</u>	Surroundings	<u>Good</u>
Travel, Specify _____		Hazards, Specify _____	

JOB SPECIFICATION

Job-**IB**

Job Title Schedule and Time Clerk Date _____

(Use (X) to indicate, (XX) to stress)

115

MENTAL REQUIREMENTS

Education 4 years or high school Special Education and one year of I. E.
Kind of Work Knowledge _____

Instructs Others	_____	Close Cooperation	<u>X</u>
High Intelligence	<u>X</u>	Close Concentration	_____
Logical Reasoning	_____	Facility in	_____
Emotional Stability	_____	Verbal Expression	_____

SKILL

Kind or Type Facility with elementary mathematics, percentages.

Time for Inexperienced Worker to Learn Job	<u>1 year</u>
To Adapt to Our Methods	<u>6mo</u>
Desirable Prior Experience	<u>Scheduling</u>
Leadership	_____
Judgment	_____
Initiative	<u>X</u>
Independent	_____
Creative Effort	_____
Decisions	<u>Limited</u>

PHYSICAL REQUIREMENTS

Nature of Physical Effort	<u>Clerical</u>
Very Active Work	<u>X</u>
Great Strength	_____
Walking	<u>35 %</u>
Much Fatigue	_____
Standing	<u>15 %</u>
Repetitive	_____
Sitting	<u>50 %</u>
Varied	<u>X</u>
Other, Specify	_____
Intermittent	_____
Age Limits _____ to _____	Minimum Weight _____

RESPONSIBILITY

Kind of Equipment, Tools or Materials Responsible for accurately kept records of daily production, labor costs and time reports.

For Supervision Given None For Supervision Received Little

For Contacts with:

Employees	<u>X</u>	Vendors	_____
Officers of Co.	_____	Public	_____
Customers	_____	Records	_____

Other Responsibilities:

Keeps full supply of time cards in racks.

WORKING CONDITIONS

Place	<u>Inside</u>	Noise	<u>X</u>
Type	<u>Clerical</u>	Congestion	_____
Illumination	<u>Good</u>	Surroundings	<u>Fair</u>
Travel, Specify	_____	Hazards, Specify	_____

JOB SPECIFICATION

Job- IC

Job Title Manager--Parts Department Date 116

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education 4 years of high school Special Education and one year in shop work or
Kind of Work Knowledge equialent in experience.
Knowledge or all parts bought or manufactured by company.

Instructs Others	<u> </u>	Close Cooperation	<u> </u>
High Intelligence	<u> X </u>	Close Concentration	<u> </u>
Logical Reasoning	<u> </u>	Facility in	<u> </u>
Emotional Stability	<u> </u>	Verbal Expression	<u> </u>

SKILL

Kind or Type Supervises receipt, storege and disbursement of raw materials and parts.

Time for Inexperienced Worker to Learn Job 1 year
To Adapt to Our Methods 6mo Desirable Prior Experience Shop experience
Leadership Judgment X
Initiative Independent
Creative Effort Decisions

PHYSICAL REQUIREMENTS

Nature of Physical Effort Semi-Clerical

Very Active Work	<u> </u>	Great Strength	<u> </u>
Walking	<u> 20 </u> %	Much Fatigue	<u> </u>
Standing	<u> 20 </u> %	Repetitive	<u> X </u>
Sitting	<u> 60 </u> %	Varied	<u> </u>
Other, Specify	<u> </u> %	Intermittent	<u> </u>
Age Limits <u> </u> to <u> </u>		Minimum Weight	<u> </u>

RESPONSIBILITY

Kind of Equipment, Tools or Materials
All spare parts and raw materials of same.

For Supervision Given Much For Supervision Received Little
For Contacts with:
Employees X Vendors
Officers of Co. Public
Customers Records X
Other Responsibilities:

WORKING CONDITIONS

Place	<u> Inside </u>	Noise	<u> X </u>
Type	<u> Clerical </u>	Congestion	<u> </u>
Illumination	<u> Good </u>	Surroundings	<u> Good </u>
Travel, Specify	<u> </u>	Hazards, Specify	<u> </u>

JOB SPECIFICATION

Job-ID _____
 Job Title Service Manager Date 117

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education 4 years of high school Special Education _____

Kind of Work Knowledge _____

Correspondence, service letters, knowledge of company products.

Instructs Others	<u>X</u>	Close Cooperation	_____
High Intelligence	_____	Close Concentration	_____
Logical Reasoning	_____	Facility in	_____
Emotional Stability	_____	Verbal Expression	_____

SKILL

Kind or Type Dictation of clear and concise letters.

Time for Inexperienced Worker to Learn Job	<u>1 year</u>	
To Adapt to Our Methods	<u>6 mo</u>	Desirable Prior Experience <u>1 yr.</u> Service Assistant
Leadership	<u>X</u>	Judgment <u>X</u>
Initiative	_____	Independent _____
Creative Effort	_____	Decisions _____

PHYSICAL REQUIREMENTS

Nature of Physical Effort _____

Clerical, Supervisory

Very Active Work	_____	Great Strength	_____
Walking	<u>10</u> %	Much Fatigue	_____
Standing	<u>0</u> %	Repetitive	_____
Sitting	<u>90</u> %	Varied	<u>X</u>
Other, Specify _____	%	Intermittent	_____
Age Limits _____ to _____		Minimum Weight	_____

RESPONSIBILITY

Kind of Equipment, Tools or Materials _____

For Supervision Given Much For Supervision Received Much

For Contacts with:

Employees	<u>X</u>	Vendors	_____
Officers of Co.	<u>X</u>	Public	_____
Customers	<u>X</u>	Records	<u>X</u>

Other Responsibilities: _____

Service Records

WORKING CONDITIONS

Place	<u>Inside</u>	Noise	_____
Type	<u>Clerical</u>	Congestion	_____
Illumination	<u>Good</u>	Surroundings	<u>Good</u>
Travel, Specify _____		Hazards, Specify _____	

Job-IE

JOB SPECIFICATION

Job Title Manager Mail & File Dept. Date 118
 (Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTS

Education 4 years of high school Special Education _____

Kind of Work Knowledge _____
 General knowledge of operation of the company. Detailed knowledge of addressograph, postage meter and graphotype.

Instructs Others _____	Close Cooperation <u>X</u>
High Intelligence _____	Close Concentration _____
Logical Reasoning _____	Facility in _____
Emotional Stability _____	Verbal Expression <u>X</u>

SKILL

Kind or Type Operating addressograph, postage meter and graphotype.

Time for Inexperienced Worker to Learn Job 3 months
 To Adapt to Our Methods 3mo. Desirable Prior Experience Mail & File Work
 Leadership X Judgment X
 Initiative _____ Independent _____
 Creative Effort _____ Decisions _____

PHYSICAL REQUIREMENTS

Nature of Physical Effort	Clerical
Very Active Work _____	Great Strength _____
Walking <u>25</u> %	Much Fatigue _____
Standing <u>25</u> %	Repetitive _____
Sitting <u>50</u> %	Varied _____
Other, Specify _____ %	Intermittent _____
Age Limits <u>19</u> to <u>40</u>	Minimum Weight _____

RESPONSIBILITY

Kind of Equipment, Tools or Materials
addressograph, postage meter, graphotype and typewriter

For Supervision Given Much For Supervision Received Much
 For Contacts with:

Employees <u>X</u>	Vendors _____
Officers of Co. _____	Public _____
Customers _____	Records _____

Other Responsibilities:

Maintaining accurate files and records.

WORKING CONDITIONS

Place <u>Inside</u>	Noise <u>X</u>
Type <u>Clerical</u>	Congestion _____
Illumination <u>Good</u>	Surroundings <u>Good</u>
Travel, Specify _____	Hazards, Specify _____

JOB SPECIFICATION

Job-IF

Job Title Shipping Superintendent Date _____

(Use (X) to indicate, (XX) to stress)

119

MENTAL REQUIREMENTS

Education 4 years of high school Special Education _____ Typing _____
Kind of Work Knowledge _____

Knowledge of freight rates, shipping procedures. Company's products.

Instructs Others X Close Cooperation _____
High Intelligence X Close Concentration _____
Logical Reasoning _____ Facility in _____
Emotional Stability _____ Verbal Expression _____

SKILL

Kind or Type Supervisory

Time for Inexperienced Worker to Learn Job 2 years
To Adapt to Our Methods 1 yr. Desirable Prior Experience Shipping Clerk
Leadership _____ Judgment _____
Initiative _____ Independent _____
Creative Effort _____ Decisions _____

PHYSICAL REQUIREMENTS

Nature of Physical Effort Clerical, Supervisory

Very Active Work _____ Great Strength _____
Walking 15 % Much Fatigue _____
Standing 15 % Repetitive _____
Sitting 70 % Varied X
Other, Specify _____ Intermittent _____
Age Limits 23 to 45 Minimum Weight No

RESPONSIBILITY

Kind of Equipment, Tools or Materials

Crating material

For Supervision Given Much For Supervision Received Much
For Contacts with:

Employees X Vendors _____
Officers of Co. _____ Public _____
Customers _____ Records _____
Other Responsibilities: And transportations companies.

WORKING CONDITIONS

Place _____ Noise X
Type _____ Congestion _____
Illumination _____ Surroundings Good
Travel, Specify _____ Hazards, Specify _____

JOB SPECIFICATION

Job-IG

120

Job Title Secretary--Sales Department Date _____

(Use (X) to indicate, (XX) to stress)

MENTAL REQUIREMENTSEducation 4 years of high school Special Education Secretarial course

Kind of Work Knowledge

General knowledge of company procedures and policies. Detailed knowledge of sales, policies and records. Good knowledge of spelling, grammar.

Instructs Others	_____	Close Cooperation	<u>X</u>
High Intelligence	_____	Close Concentration	<u>X</u>
Logical Reasoning	_____	Facility in	_____
Emotional Stability	_____	Verbal Expression	_____

SKILLKind or Type Typing--60 words per minute. Performing routine office work.

Time for Inexperienced Worker to Learn Job	<u>1 year</u>
To Adapt to Our Methods	<u>mo.</u>
Desirable Prior Experience	<u>Stenographer or Secretary</u>
Leadership	Judgment _____
Initiative	Independent _____
Creative Effort	Decisions _____

PHYSICAL REQUIREMENTSNature of Physical Effort Clerical

Very Active Work	_____	Great Strength	_____
Walking	<u>15</u> %	Much Fatigue	_____
Standing	_____ %	Repetitive	_____
Sitting	<u>85</u> %	Varied	_____
Other, Specify	_____ %	Intermittent	_____
Age Limits <u>25</u> to <u>45</u>		Minimum Weight	_____

RESPONSIBILITY

Kind of Equipment, Tools or Materials

Typewriter, adding machine, dictaphone.For Supervision Given None For Supervision Received Much

For Contacts with:

Employees	<u>X</u>	Vendors	_____
Officers of Co.	_____	Public	_____
Customers	_____	Records	_____
Other Responsibilities:			

WORKING CONDITIONS

Place	<u>Inside</u>	Noise	<u>X</u>
Type	<u>Clerical</u>	Congestion	_____
Illumination	<u>Good</u>	Surroundings	<u>Pleasant</u>
Travel, Specify	_____	Hazards, Specify	_____